

Tucker 48



The Car of Tomorrow

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Part 1

Defying Convention

3

Born of Speed

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"From the world's largest factory comes promise of a new automobile incorporating many engineering principles born of Indianapolis Speedway experiments and wartime advances. It is the Tucker car, a rear-engine sedan with disc-type brakes, luggage compartment under the hood, a windshield that breaks free for safety in impact, and a headlight that 'sees' around corners..."

Popular Mechanics, September 1947

RE: during WWII, automobile companies' operations were dedicated to the war effort. Denied new car models for four years, by war's end Americans were anxious for a new automobile - any new automobile. For Preston Tucker, the time was right to realize his dream. Although more than thirty new companies announced they would build "Brand New" cars after WWII, only Tucker and Kaiser-Frazer seemed willing and able to compete with Detroit's "Big Three." In 1946, Preston Tucker formed the Tucker Corporation, for the manufacture of Tucker automobiles.

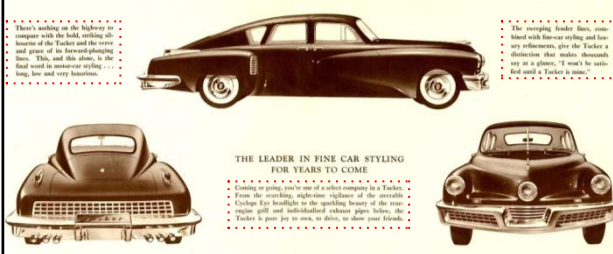
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The Final Word

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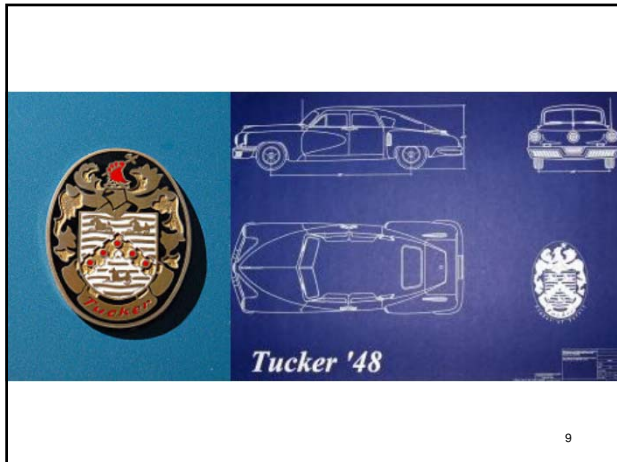
There's nothing on the highway to compare with the bold, striking silhouette of the Tucker and the verve and grace of its forward-plunging lines. This, and this alone, is the final word in motor-car styling...long, low and very luxurious.

The sweeping fender lines, combined with fine-car styling and luxury refinements, give the Tucker a distinction that makes thousands say at a glance, 'I won't be satisfied until a Tucker is mine.'

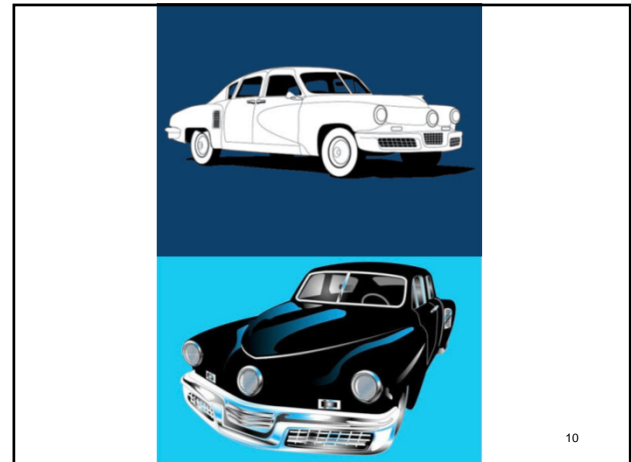
THE LEADER IN FINE CAR STYLING FOR YEARS TO COME

- Coming or going, you're one of a select company in a Tucker.
- From the searching, night-time vigilance of the steerable Cyclops Eye headlight to the sparkling beauty of the rear-engine frill and individualized exhaust pipes below, the Tucker is pure joy to own, to drive, to show your friends.

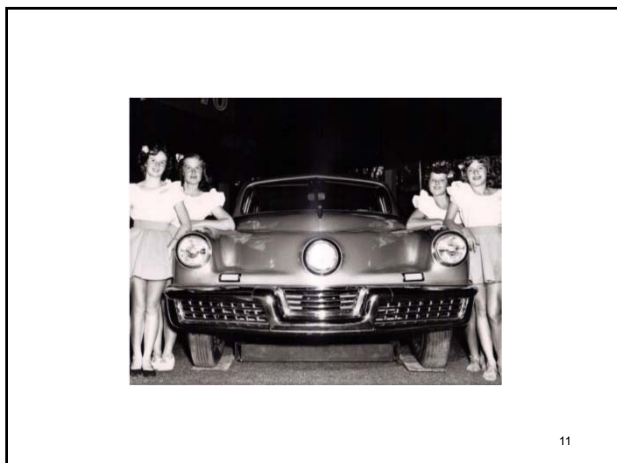
Above: caption/s: "There's nothing on the highway to compare with the bold, striking silhouette of the Tucker and the verve and grace of its forward-plunging lines. This, and this alone, is the final word in motor-car styling...long, low and luxurious. Coming or going, you're one of a select company in a Tucker. From the searching, night-time vigilance of the steerable Cyclops Eye headlight to the sparkling beauty of the rear-engine frill and individualized exhaust pipes below, the Tucker is pure joy to own, to drive, to show your friends. The sweeping fender lines, combined with fine-car styling and luxury refinements, give Tucker a distinction that makes thousands say at a glance, 'I won't be satisfied until a Tucker is mine.'" 8



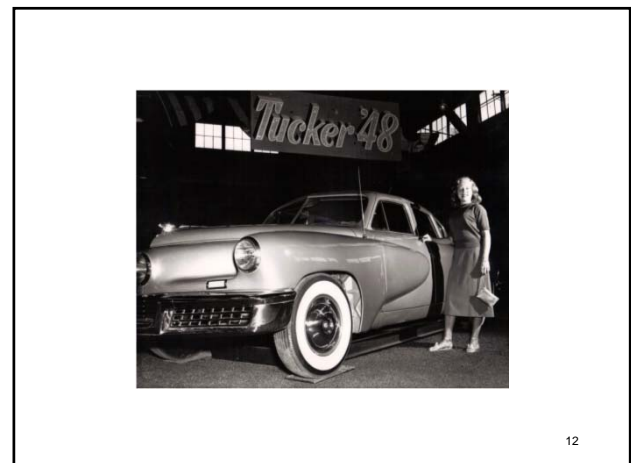
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Among Other Departures

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"...will be one of the lowest cars ever built. The six passenger, six-cylinder model will weigh less than 3,000 pounds. Among other major departures from conventional design:

- The engine, placed in the rear instead of the front, will be mounted transversely across the chassis, supplying power directly to the rear wheels.
- Eliminated will be not only the conventional transmission, but the clutch, driveshaft with floor tunnel, torque tube, and differential.
- Economy - up to 35 miles to the gallon - will be gained by fuel injection, high frequency ignition, lighter weight and elimination of 800 parts.
- Sustained cruising speed of 100 mph will be possible with the 150 h.p. airplane type engine.
- Liquid coolant which flows at temperatures from -50 to 250-degrees F. will be sealed into radiators.
- Mounted with four bolts, the one-package power plant can be removed and replaced in less than an hour. Dealers will stock spare engines.
- Brakes, carrier-based airplane type, with a single disc between two friction surfaces, will stop the car in two-thirds the distance required by conventional drum brakes.
- 'Cyclops Eye,' a third headlight mounted in the center of the hood, will turn with the wheels to light curves."

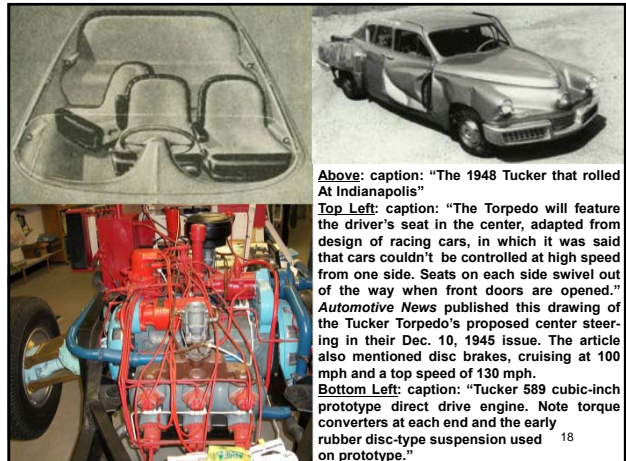
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Pathfinder magazine, April 29, 1947

Other interesting facts concerning the Tucker 48 include:

- Alex Tremulis' original design had a center driving position with swivel seats on each side, but that was changed to conventional left-hand drive;
- the first 589-cubic-inch engine was situated crossways and intended to drive the back wheels directly through hydraulic pumps in each wheel;
- when buyers ordered a car, they received a choice of a Tucker radio, seat covers or fitted luggage and the specific number of their car (to prevent "jumping-the-line");
- malicious rumors went around that the Tucker 48 did not have a reverse gear thus, the first thing Tucker salesmen demonstrated to potential customers was the fact that it could, indeed, back-up on its own;
- Preston Tucker hoped to make a favorable impression of his 5-foot high automobile to Colonel Robert McCormick, publisher of the *Chicago Tribune*. However, when the 6-foot, 4-inch McCormick sat up in the car, his hat was pushed down over his ears;
- The actual engine used was a water-cooled adaptation of an air-cooled aircraft (helicopter) engine. Tucker bought *Aircooled Motors* for \$1.8 million from *Republic Aviation* (Tucker first tried the *Lycoming* aircraft engine, but it would not fit in the car's rear engine compartment);
- The Tucker engine could be removed in 30 minutes by one man. Three mechanics at the factory accomplished a complete engine swap in 18 minutes;
- Seven Tuckers were driven around the 2.5-mile *Indianapolis Speedway* oval for two weeks at 90-95 mph average in 1948. One car blew a tire at 100 mph and rolled three times, but the driver walked away unhurt, and;
- The Tucker 48's original proposed price was said to be \$1K, but the actual selling price was closer to \$4K.

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Above: caption: "The 1948 Tucker that rolled At Indianapolis"

Top Left: caption: "The Torpedo will feature the driver's seat in the center, adapted from design of racing cars, in which it was said that cars couldn't be controlled at high speed from one side. Seats on each side swivel out of the way when front doors are opened." *Automotive News* published this drawing of the Tucker Torpedo's proposed center steering in their Dec. 10, 1945 issue. The article also mentioned disc brakes, cruising at 100 mph and a top speed of 130 mph.

Bottom Left: caption: "Tucker 589 cubic-inch prototype direct drive engine. Note torque converters at each end and the early rubber disc-type suspension used on prototype."

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With help from *Ben Parsons*, then owner and president of the *Fuelcharger Corporation* (later Tucker Corporation's VP of Engineering), Tucker initially tried to develop an innovative engine. It was a 589 cubic-inch flat-six with hemispherical combustion chambers, fuel injection and overhead valves operated by oil pressure rather than a camshaft. An oil pressure distributor was mounted in-line with the ignition distributor and delivered appropriately timed direct oil pressure to open each valve at proper intervals. The oil pressure fed to each valve was "timed" by intake and exhaust eccentrics and measured by spring-loaded plungers. Built of aluminum and magnesium castings (with steel-plated cylinder linings), the huge pistons required up to 60 volts to turn over the starter (nearly triple the power of a normal starter). The engine was designed to idle at 100 rpm and cruise at 250-1,200 rpm through the use of direct-drive torque converters on each driving wheel in lieu of a transmission. It was designed to produce almost 200 hp and 450 lb-ft of torque at only 1,800 rpm. When cruising at 60 mph, it would rev at approximately 1K rpm. As engine development proceeded, problems appeared. Six prototypes of the 589 cubic-inch engine were built, but it was installed only in the test chassis and the first prototype.

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Tucker had promised 150 hp, but his innovative engine was not working out. The valve train proved highly problematic and the engine only produced approximately 88 hp. The high oil pressure required a 24-volt electrical system (up to 60 volts to get it started) and a long cranking time at start-up. Additionally, the oil pressure required to maintain valve function was not achieved until the engine was turning at higher RPMs (Tucker's engineers struggled to keep the valve train working at idle and lower speeds/RPMs). Having wasted nearly a year trying to make the 589 functional, Tucker started looking to the aviation industry for alternative power plants for his new car.

Left: caption: "Examining the aft-mounted engine" 21

A Buck Rogers Special

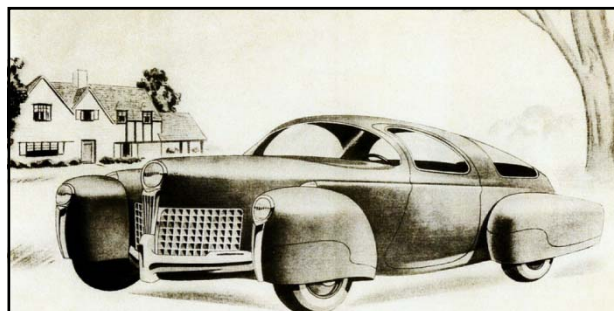
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Preston Tucker was not an automotive engineer by training, however, few would argue that he possessed the ability to understand and comprehend all matters automotive. With a background that included everything from automotive sales to car design, it was inevitable that one day Tucker would turn his attention towards constructing a production automobile that carried his own name, and ideas. As originally envisioned by designer *George Lawson*, the *Tucker Torpedo* featured streamlined bodywork and the driver in a central position. Located in the rear, the proposed 589 cubic-inch aluminum flat-six engine would be so understressed that an overhaul would not be required for the first 180K miles. As well, Tucker's original design lacked a conventional transmission. Instead, a pair of torque converters sent power to the rear wheels.

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Left: caption: "Preston Thomas Tucker"



Above: caption: "America's Most Modern Automobile. Sleek, safe and fast, the rear-engine Tucker Torpedo brings custom built performance to the medium price field. Enjoy unequalled comfort in this roomy 126-inch wheelbase car, free from the noise, vibration, heat and fumes of a conventional automobile. Feel the surging drive of its 150 horsepower engine, unshackled by excess weight. Drive safely with full vision front and rear, and experience big car performance with small car economy."

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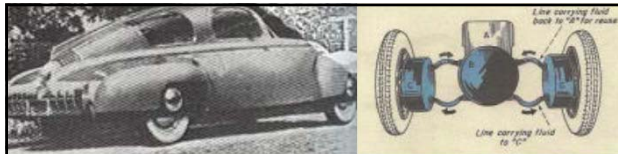
TORPEDO ON WHEELS

Engine in rear, all-hydraulic drive

make the Tucker a real car of the future

More like a Buck Rogers Special than the automobiles we know today, the Tucker Torpedo is scheduled to hit the road sometime in '47. If all goes according to plan, this startling car will incorporate a series of spectacular engineering innovations that conservative auto manufacturers have classified as 'at least five or six years off.' Here are some of the highlights of this 126-inch wheel-base vehicle in its present design: Hydraulic torque converters provide a direct power-transmitting system that does away with the customary clutch, transmission, drive shaft, differential, and rear axle. That eliminates about 800 working parts and their associated weight and cost."

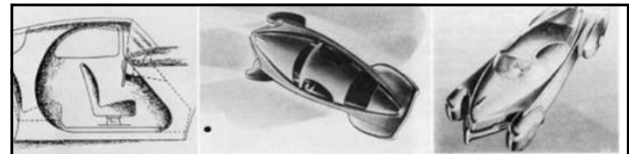
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Left (inset from December 1945 SI ad): caption: "Long, low, and streamlined, the Tucker Torpedo has doors that extend into the top for easier getting in and out. Brakes are of an automatically adjusting type developed originally for racing cars. A new engine can be installed in 15 minutes when necessary."

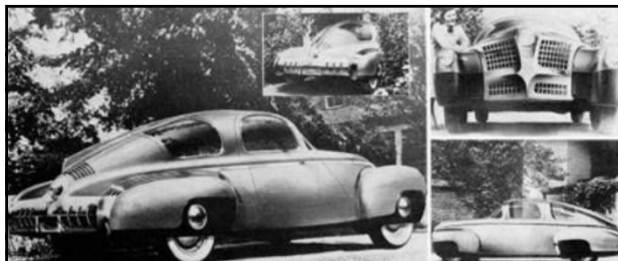
Right (inset from December 1945 SI ad): caption: "Operation of car's hydraulic drive is shown in diagram. Fluid in reservoir (A) flows to pump (B) driven by car's engine. Pump forces fluid through flexible pipes in hydraulic masters (C) which drive rear wheels. Fluid then returns to reservoir for reuse."

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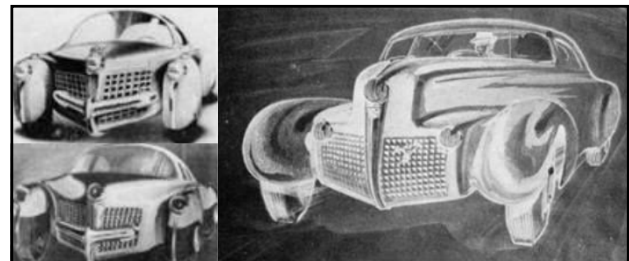
Above (left-to-right): caption: "Left: Doors on Lawson's proposed Tucker would have been hard to hinge. Center: Tucker's streamlining was to be in all three directions, with tapered front and rear. Most attempts at 'streamlining' took only side view into account. Pivoting front fenders would have been impractical at high speeds because of their rudder action. Right: It was never determined whether air for rear engine would have entered up front or at rear."

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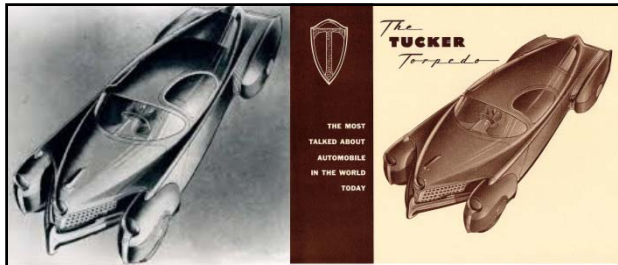
Above L&R: caption: "Left: Tucker used these shots of Lawson's scale model (photographed in settings to look real by air-brushing) in his first stock prospectus. Tucker's publicity claimed his \$1,000 car would get 35-45 mpg and cruise at 100 mph. Right: More airbrushed photos of scale model for Tucker's brochure show Lawson's initial design. Here, headlamps pivoted, with cyclops eye stationary. In Tremulis design, central eye turned, with outboard lamps fixed."

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Above L&R: caption: "Left: Twin Tucker sketches contain many elements of far-out pre-war Buick at right. Tucker, wanting only a design to sell stock against, let lawson run wild. Right: While he was Buick studio chief, Lawson sketched advanced Buicks with cyclops headlights and driver in middle of car. Harlow Curtice eased Lawson out of Buick on account of these designs."

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Instead of just two headlights, George Lawson's *Tucker Torpedo* boasted three, including outboard headlights designed to turn with the turnable front fenders. Four-wheel independent suspension featured disc-brakes at all four corners while pioneering safety features included a padded dashboard, front and rear seat belts and, in the event of a crash, a "pop-out" windshield.

Left: caption: "Concept drawing of the 1946 Tucker Torpedo"

Right: caption: "Tucker Torpedo brochure, ca. 1947." This concept drawing includes a centrally positioned steering wheel, doors that wrap-up far into the roof and front fenders that turn when the car is cornering.

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Dickering with the Government

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"First models of the Tucker '48, only really revolutionary postwar car so far, should be ready for public showing in New York, Chicago, and on the West Coast within 60 days. Last week President Preston Tucker said he expects cars to be rolling off his assembly line late this fall at the rate of 200 a day. The 44-year-old automotive designer is dickering with the Government for a 10-year lease of the big Dodge B-29 Superfort engine plant in Chicago, with an option to purchase within nine and a half years for \$30 million. The lease will become effective July 1, if Tucker's financial arrangements satisfy the War Assets Administration..."

Pathfinder magazine, April 29, 1947

RE: having raised \$17 million in a stock issue (one of the first speculative IPOs), Tucker needed more money to continue development of his car and support his fledgling corporation. To raise money, he sold dealerships and distributorships throughout the U.S. and abroad. Another money maker was the *Tucker Accessories Program*. In order to secure a favored spot on the Tucker waiting list, prospective buyers could purchase accessories (i.e. seat covers, radio, luggage) before their car was built. This unorthodox scheme to raise capital brought in an additional \$2 million, however, it would come back to haunt Preston Tucker in the days, weeks and months ahead.

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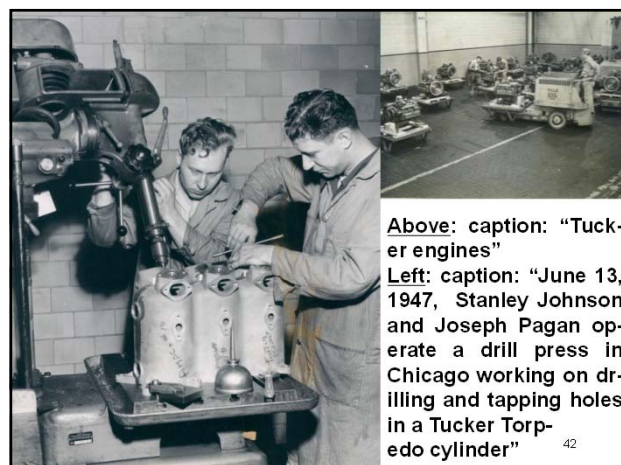
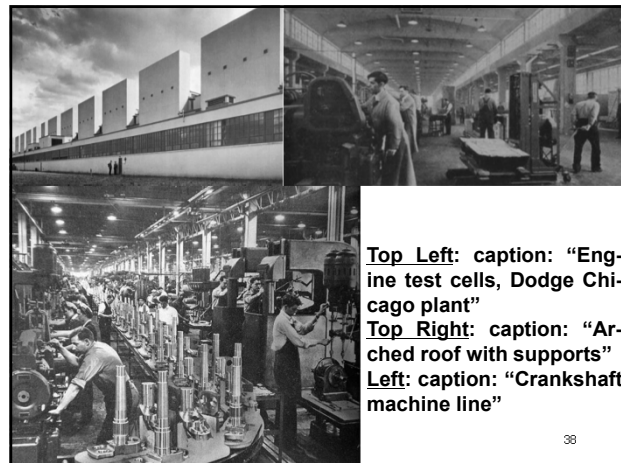
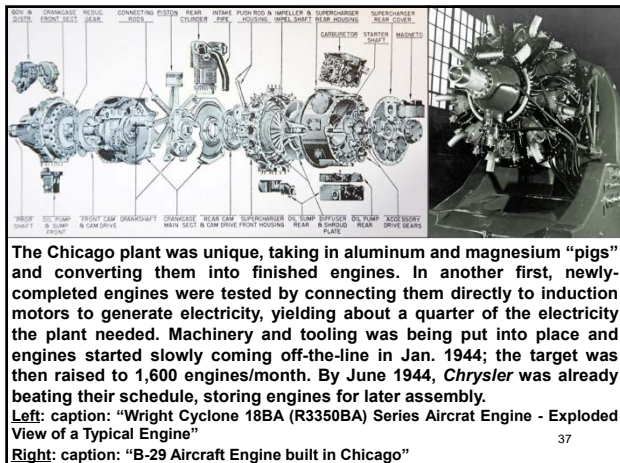
"...In Chicago, Preston J. Tucker has a 10-year lease on the former Dodge plant, and the revolutionary Torpedo with its Cyclops headlight, driver's seat between two passengers and rear-engine design may get into production before 1948. There are many car makers who feel his obstacles are too big to be overcome before then..."

Popular Mechanics, November 1946

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Tucker set his sights on the old Dodge plant in Cicero, Illinois (south Chicago). Spanning over 475 acres, the plant built engines for the *B-29 Superfortress* during the war. Its main building, covering 93 acres, was, at the time, the world's largest building (in SF area). After *Pearl Harbor*, the *U.S. Army Air Corps* pushed the B-29 bomber program forward; needing a new source of *Wright Cyclone* engines for the big planes, they turned to *Chrysler Corporation*. The government chose a site in Chicago for the plant and factory architect *Albert Kahn* worked with 1,200 Chrysler personnel to develop an innovative factory design that used half the steel (per square foot) that a conventional building would, saving 9,200 tons of steel (enough for 14 destroyers or over 600 medium-sized tanks). The major innovation was a new type of overhead arch-rib construction which had holes ready for attaching rails, trolleys, pipes and other equipment. Factory construction (by General Contractor *George A. Fuller Company*) broke ground in June 1942 and proceeded day and night. Sixteen of the buildings were operational by March 1943. In all, they would house more than 9K metal-working and fabrication machines and complete support tooling. A year later, the 6.3 million square foot, 19-building complex was finished; the main building was 82 acres in floor area, with 22 air-conditioned acres to support the precision assembly processes. It cost \$173 million. The plant housed over 6K machine tools and required 23 cafeterias for its 16K employees.

36





A Full Year Ahead!

America's First 1947 Motor Cars

KAISER
The American Car
FRAZER
BUILT AT WILLOW RUN

BRILLIANTLY ENGINEERED • SMARTLY DESIGNED • HONESTLY BUILT



“...Its home is the 500-acre wartime Dodge plant in Chicago, 20 baseball parks bigger than famed Willow Run...”
Popular Mechanics, September 1947

Above: caption: “Willow Run, factory where the Kaiser-Frazer Corporation built cars. At the time, the largest building under one roof in the world.”

Left: caption: “1947 K-F ad featuring the Willow Run plant”

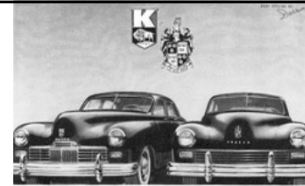
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After Tucker Corporation's demise, *Ford Motor Co.* bought the plant for vehicle production (they had sold their own enormous *Willow Run* aircraft assembly plant to *Kaiser-Frazer Corporation*, who operated it as their home plant until they sold it to GM). FMC later took the Chicago plant out of auto production. Today, about half the building is the corporate headquarters of *Tootsie Roll Industries*. The remainder is known as the “Ford City Mall.”

48

Fear of the Unknown

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TREASURE CARS ARE BACK!

Kaiser and Frazer reveal have discovered that automobile travel is a pleasure. They write from everywhere to say that at last they have found the car they have wanted for years. And they choose prove the useful role that means an enjoyable journey for them and their passengers alike. This revolutionary idea results in a month of general economic engineering and body design. There has never been anything like it before. What you need is a Kaiser or a Frazer as a way to anywhere — and here what usually eludes really reveal.

Kaiser-Frazer Corporation • WILLOW RUN, MICHIGAN

FRAZER

“...A recent advertisement in the New York Times highlighted the troubles that beset new makes: ‘Kaiser, 1947, low mileage, 4-door deluxe, at list, will exchange for good used car...’ In some cities K-Fs were available for immediate delivery while used 1947 models of other automobiles were hard to get even at \$100 or more above the list price. Reason: Buyers are leary of paying high prices for an ‘unknown’...”

Pathfinder magazine, April 29, 1947



“...Tucker engineers hope they can avoid these early growing pains by offering a genuinely new car fully proved before it reaches the market. Its price - about \$1,800 - will not be definitely fixed until manufacturing and component costs have been determined...”

Pathfinder magazine, April 29, 1947

RE: the Tucker 48's mechanical components were highly innovative. The perimeter frame surrounded the vehicle for crash protection; the steering box was behind the front axle to protect the driver in case of a front-end accident. However, numerous Tucker innovations were dropped: magnesium wheels, disc brakes and a direct-drive torque converter transmission were, ultimately, all left on the drawing board. These features would have been auto industry firsts in 1948.

Above: caption: “Tucker ‘48. It will have rear-mounted engine, many race-car features”

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“...Its designer and builder is Preston Tucker, who learned by working for Ford, Cadillac, Studebaker, Chrysler and Pierce Arrow, and by building racing cars...”

Popular Mechanics, September 1947

RE: much of the appeal of the Tucker automobile was the man behind it. Six-foot tall and always well-dressed, Preston Tucker had an almost manic enthusiasm for automobiles. Born September 21, 1903 in Capac, MI, Preston T. Tucker spent his childhood around mechanics' garages and used car lots. He worked as an office boy at Cadillac, a policeman in Lincoln Park (MI) and even worked for a while on the Ford assembly line. After attending Cass Technical School in Detroit, Tucker turned to what came naturally: salesmanship. First for Studebaker, then Stutz, Chrysler and finally as regional manager for Pierce-Arrow.


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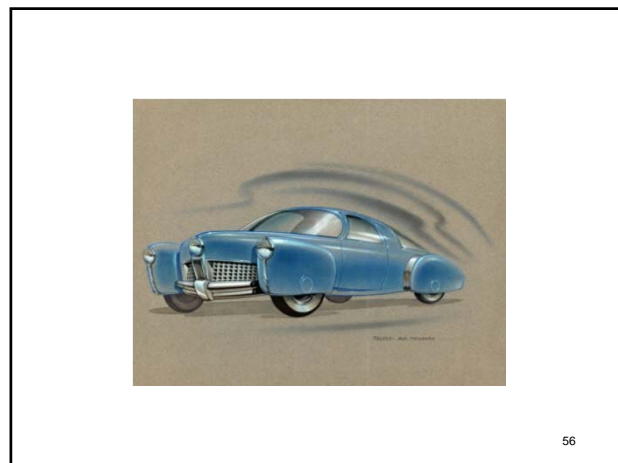
All Backwards

54



Caption: "Daredevil speeds of yesterday will be only moderate Sunday afternoon clips to tomorrow's conservative driver in the new passenger car designed by Preston Tucker, nationally-known engineer and race car builder. Tucker calls his new creation the 'Torpedo.' It is designed to cruise with safety at 100 miles per hour and has many features never before built into a passenger automobile. Among the Torpedo's most unusual features are center steering, fenders and front wheels mounted as units so that the fenders turn with the wheels, rear engine with 'torque converter' power transmission, disc-type brakes and a sealed cooling system. The torque converter, which the designer says is the key to successful use of the engine in the rear, eliminates gear transmission and differential altogether."

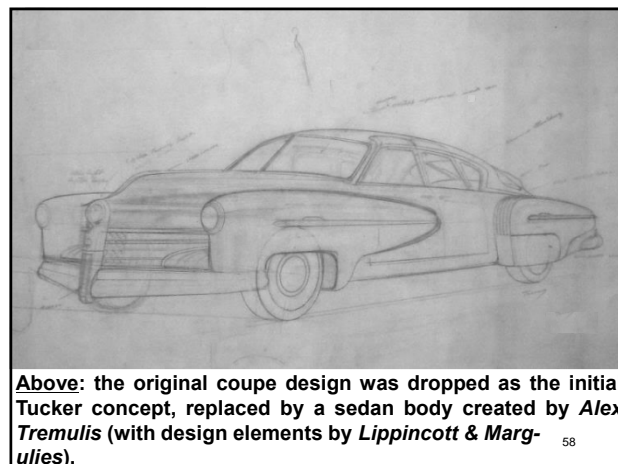
Caption (bottom): "Yes its all backwards. Engine is below the rear window, luggage goes under the hood."



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During the car's design and early promotion, it was referred to as the "Tucker Torpedo" (though Tucker himself quickly changed the name to "Tucker 48" (to avoid reminding potential buyers of WWII). *Eddie Offutt*, a mechanic who had previously worked with Tucker and his racing car partner, *Harry Miller*, on assembling cars for the *Indianapolis 500*, signed on to assist *Alex Tremulis* with production of the initial prototype. First revealed via design sketches in late 1946, Tucker began promotion of his revolutionary automobile in March 1947 with a series of full-page ads in national newspapers. Partnering with well-funded businessmen would have meant relinquishing control, so Tucker adopted a more innovative way of raising money; he'd sell dealership rights to companies eager to peddle the *Tucker 48* to a waiting, eager public. To further boost funding, he'd later offer shares of *Tucker Corporation* stock to prospective buyers and would even sell accessory items such as luggage to those on the waiting list for a Tucker automobile.

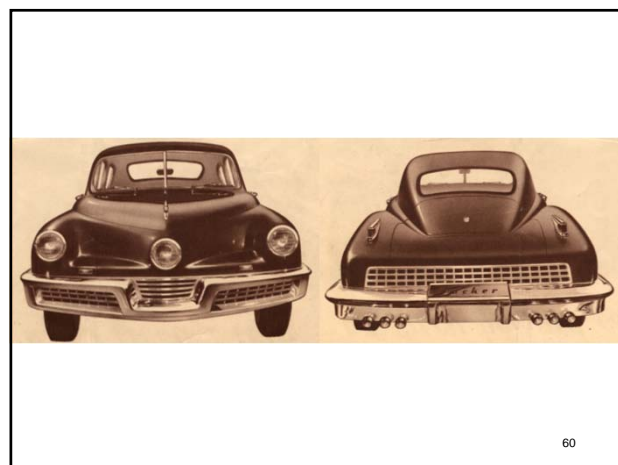
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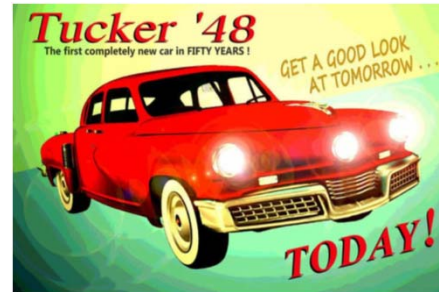
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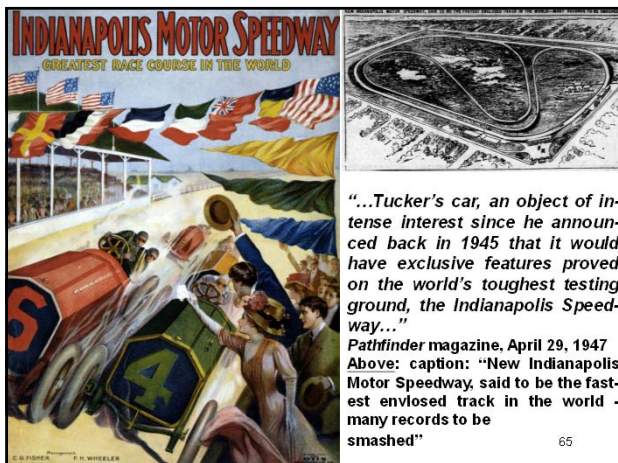
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The Need for Speed

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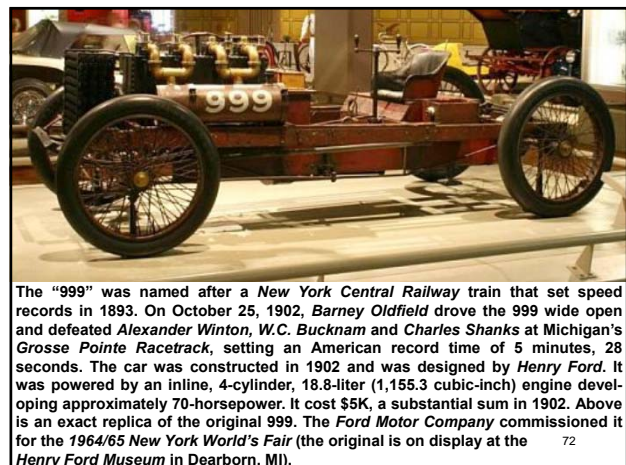
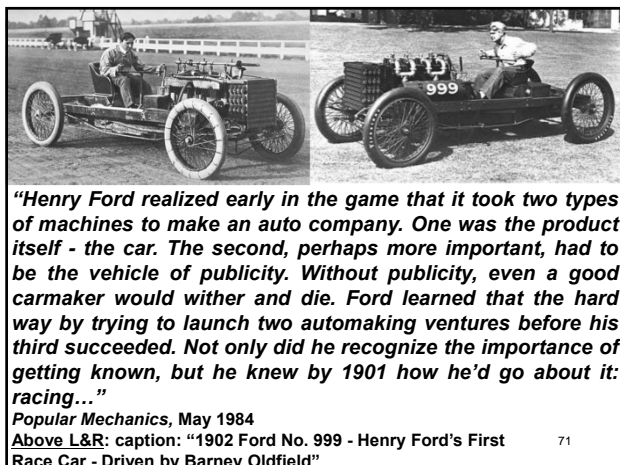
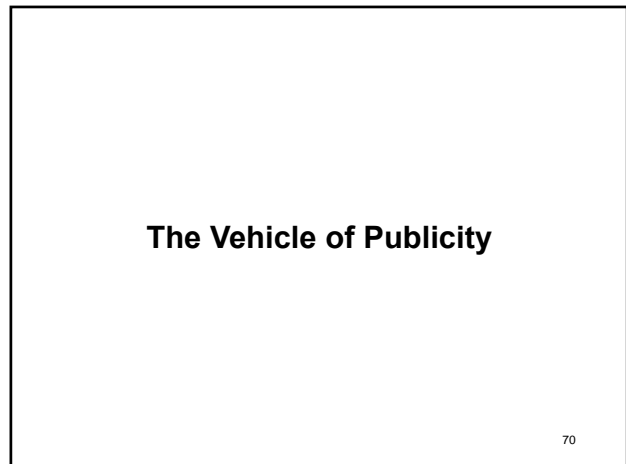
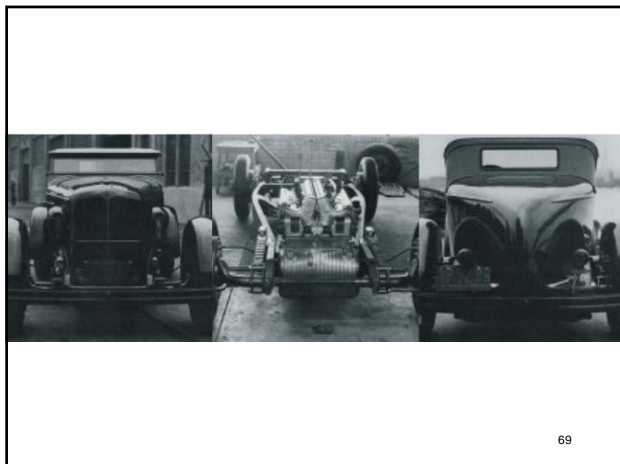
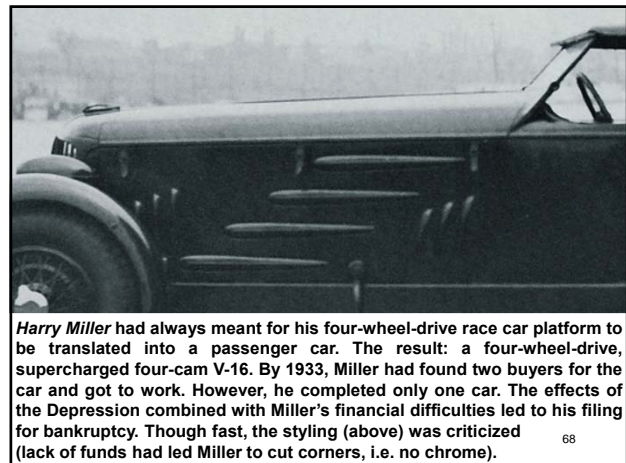
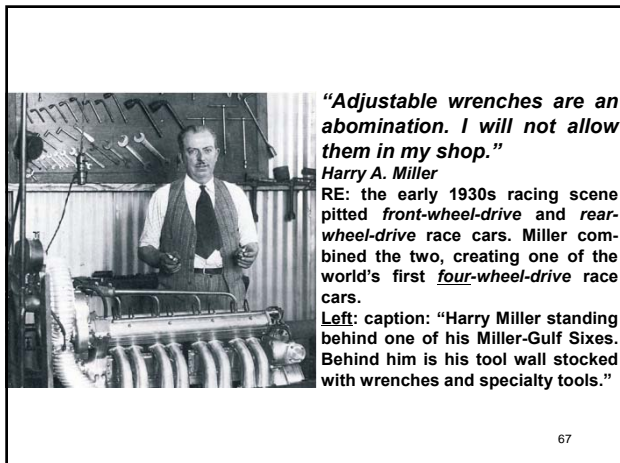
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"...In 1926 Tucker and the late Harry Miller became associated in designing and building racing cars. In 15 years, Miller Specials won 11 Indianapolis Speedway classics. The team of Tucker and Miller brought many refinements to the automotive industry, including one of the first conversion heads which changed the shape of the combustion chamber for higher compression and bigger valves..."

Popular Mechanics, September 1947

RE: as a salesman, Tucker crossed paths at the Indianapolis Motor Speedway with the great engine designer Harry A. Miller and, in 1935, they formed Miller-Tucker, Inc. Their first contract was to build race cars for Edsel Ford.

66

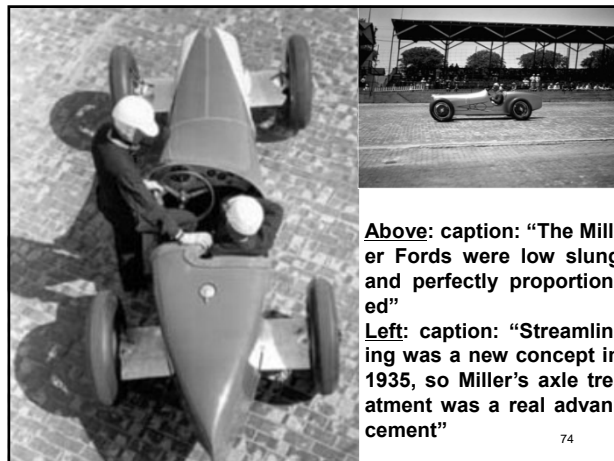


"...The Ford V8, which stayed basically unchanged from 1932 through 1948, remained the engine of choice for hot rod-ders...The Ford Motor Co. didn't get back into formal competition until the 1935 Indy 500, when Preston Tucker talked Edsel Ford into fielding 10 Ford V8-powered fwd race cars designed and built by Harry Miller. Miller cars and engines had won six Indy 500s, including those of the past three years, so it seemed a safe bet that Miller could make a Ford win the 1935 race..."

Popular Mechanics, May 1984

RE: the Tucker-Miller race cars built for FMC were as beautiful as they were mechanically advanced. Each featured front-wheel-drive, a reverse mounted (21 stud-per-head, flathead-Ford V8) engine and four wheel independent suspension. However, it was the low slung chassis and aerodynamic styling that really made a bold statement.

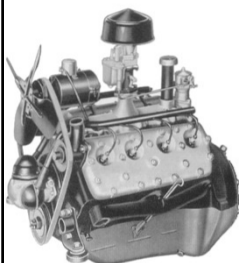
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Above: caption: "The Miller Fords were low slung and perfectly proportioned"

Left: caption: "Streamlining was a new concept in 1935, so Miller's axle treatment was a real advancement"

74



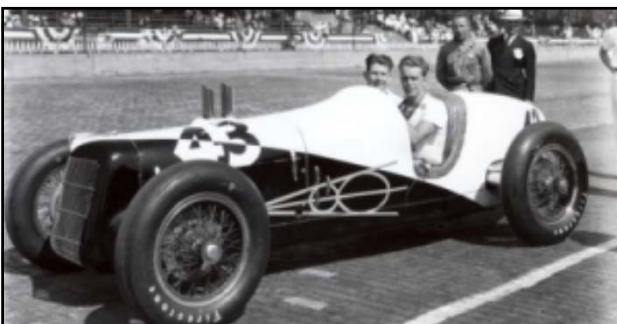
Left: caption: "Ford 1933 V8 Engine (pumps in heads)." The common 221 cubic-inch, 85 hp engine had 21 studs-per-head (displacement remained the same from 1932 to 1938). Ford started with cast iron heads but changed to aluminum heads for 1933. The aluminum heads were a problem in service and were frequently replaced with cast-iron (corrosion made the aluminum erode and become difficult to remove). The 21 stud block was manufactured for partial 1938 model production, with the remainder consisting of the newly introduced 24 stud-per-head block.

75



Above: caption: "At the Indianapolis 500 speedway 1932, L to R: Henry Ford, Harvey Firestone, Preston Tucker, Henry Ford II, Benson Ford and Edsel Ford"

76

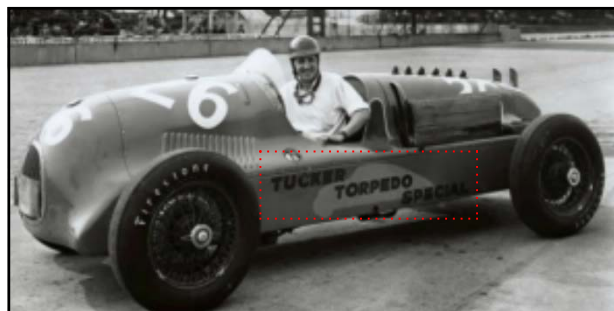


"...Beautiful as they were, time didn't allow proper testing and development of the eight Indy cars that were finally built. Only four managed to qualify, and they all dropped out within 145 laps due to steering problems..."

Popular Mechanics, May 1984

RE: the cars featured streamlining and independent suspension, but 16th place was the best driver Ted Horn could manage. Henry Ford killed the project.

77



Preston Tucker sponsored the Tucker Torpedo Special (above) in the 1946 500-Mile race at the Indianapolis Motor Speedway. It was a rear-engine creation built by Harry Miller. Driver George Barringer was forced out of the race by gear trouble. The car was one of several Miller built for the Gulf Oil Company.

78



79

No. 1023

80

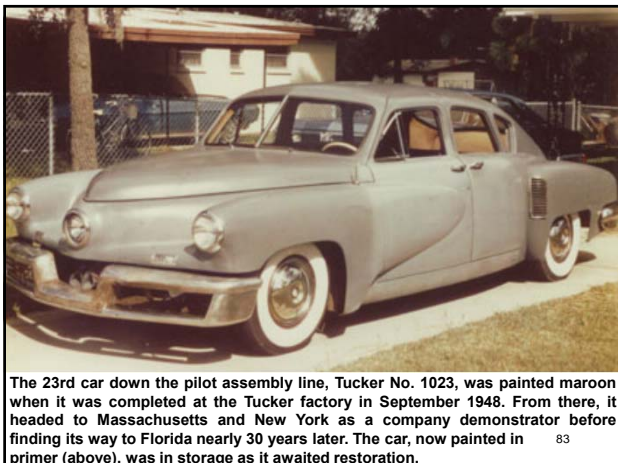


Tucker No. 1023 was believed to be the car driven by *Joe Merola* at the race held on Memorial Day 1951 at *Canfield Speedway*. The car finished last with no laps completed (it broke a right rear axle on the first lap). No. 1023 was destroyed in the late 1970s while in storage at a mattress factory that burned to the ground. The remains of the car were buried under the garage of a TACA (*Tucker Automobile Club of America*) founder.

Above L&R: caption: "Tucker No. 1023 at the 1951 Memorial Day race at Canfield Speedway" 81



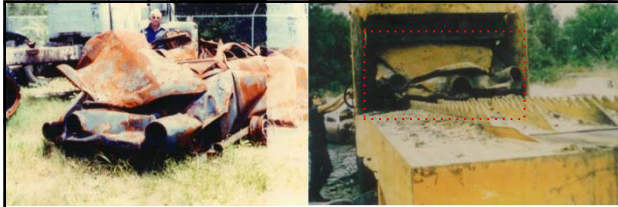
82



The 23rd car down the pilot assembly line, Tucker No. 1023, was painted maroon when it was completed at the Tucker factory in September 1948. From there, it headed to Massachusetts and New York as a company demonstrator before finding its way to Florida nearly 30 years later. The car, now painted in primer (above), was in storage as it awaited restoration. 83

In the early morning hours of September 29, 1978, a fire broke out in the 20K square-foot *Allied Van Lines* warehouse in Deland, FL, in which the car was stored. The building served as storage for many Allied customers, housed an auction and a heavy equipment repair service and stored more than 100K yards of military camouflage fabric for the *Brunswick Corp.* These contents burned so hot that fire investigators had to use cranes to remove the mass of twisted steel beams. Under the rubble lay what was left of Tucker No. 1023.

84



"Today, my two-and-a-half-car garage rests on top of the remains of Tucker No. 1023"

Richard Jones

RE: the fire-damaged Tucker No. 1023 sat unprotected until April 1980, when it was finally released from the site. The rusted, warped hulk revealed only a few salvageable items when noted Tucker historian *Richard Jones* inspected it and brought it home. What was left was taken to the scrap yard crusher, reduced to a square block of metal and later buried in his back yard.

Left: caption: "The burned-out, rusted, warped hulk of Tucker No. 1023 around 1980, just moments before it entered the crusher"

85

Right: caption: "Tucker No. 1023 going to the crusher"



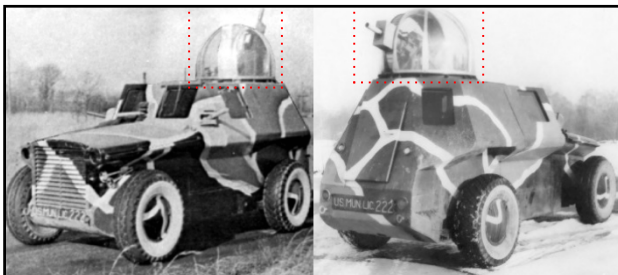
86

The Tucker Tiger

87

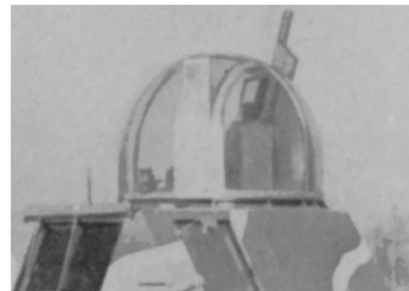
In 1937, *Preston Tucker* was General Manager of Bud Cott's *Packard Auto Agency* near 12th and Meridian Street/s in Indianapolis. He lived in Williams Creek for a while, and then moved to a 20-acre farm just northwest of Noblesville, IN. While recuperating from an appendectomy, Tucker conceived the idea for a high-speed military scout car with a power-operated gun turret, which would give the vehicle a full field of fire. With war clouds gathering, the Dutch government wanted a combat vehicle suited to their muddy terrain. Continuing his working relationship with *Harry Miller*, Tucker began designing a narrow-wheelbase armored combat car powered by a Miller-modified *Packard V-12* engine. The car was nicknamed "The Tucker Tiger." At least one prototype of the combat car was built (production combat cars would be produced at the Rahway, NJ factory of the *American Armament Corp*). However, in the Spring of 1940, Germany invaded the Netherlands, before Tucker could complete the deal with the now defunct Dutch government.

88

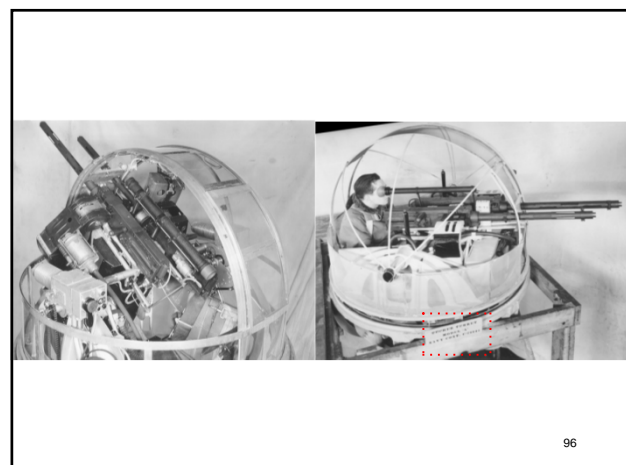
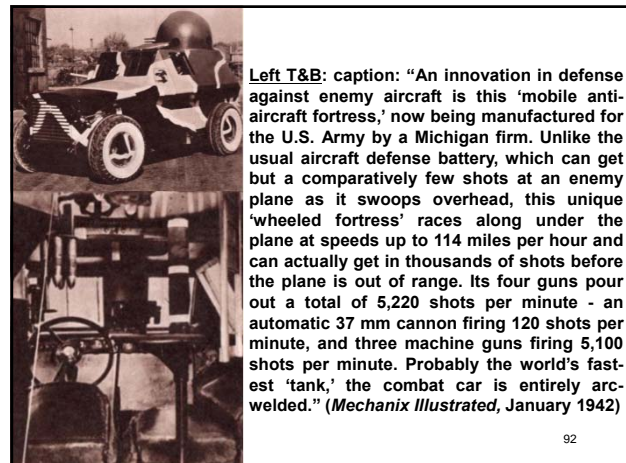
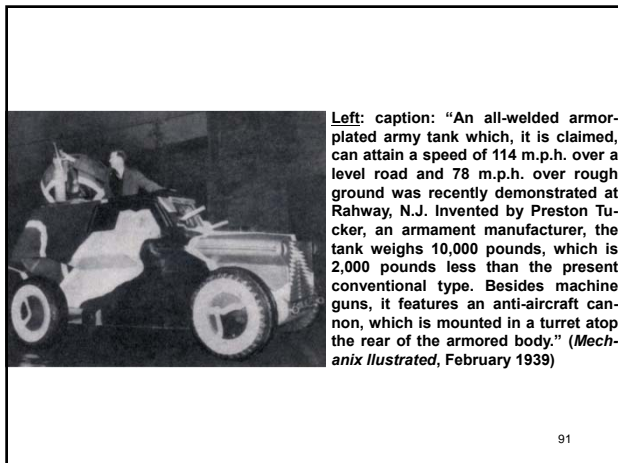


Tucker completed the prototype (above L&R) and opted to try to sell the vehicle (which could reach 114 mph on level road - far in excess of design specifications) to the U.S. Government. Equipped with a 0.50-cal. (facing forwards) and two flanking 0.30-cal. machine guns, its principal armament was a 37mm cannon in a rooftop turret (for anti-aircraft defense). Capable of +70 mph off-road, the U.S. military felt the vehicle was too fast and had already committed to other combat vehicles. *Harry Miller* would later take some of the designs from the *Tucker Combat Car* to *American Bantam*, where he was involved in the development of the first "Jeep."

89



90



The Peashooter


97

Prior to the outbreak of WWII, the *U.S. Army Air Corps* (US-AAC - renamed during WWII “*U.S. Army Air Force*” or USAAF) seriously began to consider the concept of a lightweight defensive fighter capable of intercepting enemy bombers in American air space. The aircraft would be designed with minimal use of strategic war materials (i.e. metals) while possessing performance and armament suitable for an interceptor role. From this concept came several lightweight fighter programs - one of them was the *Tucker XP-57*.

98

Preston Tucker saw the potential of U.S. military contracts for his privately-owned machine parts business and began a design concept for a lightweight interceptor (“Model AI-5”). Due to its proposed dimensions, it was nicknamed “Peashooter.” In 1940, Tucker formed a start-up, the *Tucker Aviation Corporation*, with the goal of manufacturing aircraft and marine engines. In July 1940, TAC was awarded a USAAC contract to develop a single, low-cost prototype under the designation “XP-57.”

99



Chief armament was the 37mm cannon fed by a belt-type magazine holding 30 rounds. Bells had a 20mm cannon instead.

Pilot sat in an extremely protected cockpit surrounded by armor. This was especially useful in the ground attack role.

A large percentage of the P-39s were the Soviet red star & were assigned to the elite G.I. regiments.

Engine was mounted immediately behind the pilot's seat.

Aircobras also had a pair of 12.7mm (50 cal) top of the forward fuselage. Later versions had 2 more MGs in underwing pods.

Due to the cannon & engine installation, Bell had to design a tricycle landing gear - the first in an operational fighter.

The Soviet Air Force found the Airacobra ideal for tank busting and for air-to-air combat as well.

The resulting design was a single-seat/engine with “tricycle” landing gear (akin to the *Bell P-39 Airacobra*). The *Miller L-510-1 V-12* liquid-cooled 720 hp engine was placed behind the cockpit (a drive-shaft turned the two-bladed propeller in the nose, which also contained a 20mm cannon). Well armed, the XP-57 had a rate-of-climb of 1,700 fpm. To keep weight down and satisfy the specifications to minimize use of essential war materials, the wings would be made of wood with a fabric covering (a steel-tube frame with aluminum skin was used for the fuselage). No armor plating would be provided for the cockpit or engine (to reduce weight and cost).

Above: the *Bell P-39 Airacobra* was one of the principal American fighter aircraft in service at the start of WWII. Although its mid-engine placement was innovative, the P-39 design was handicapped by the lack of an efficient turbo-supercharger, limiting it to low-altitude work. However, the P-39 was used with great success by the *Soviet Air Force* as a tank-buster during the war.

Tucker XP-57 “Peashooter”

Role:	Fighter
Manufacturer:	Tucker Aviation Corporation
Designed by:	Preston Tucker
Status:	Cancelled
Number built:	None

General characteristics:

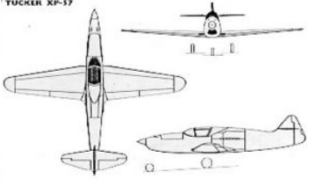
- * Crew: One
- * Length: 26 ft 7 in (8.1 m)
- * Wingspan: 28 ft 5 in (8.7 m)
- * Height: 8 ft in (2.4 m)
- * Wing area: 120 ft² (11.1 m²)
- * Empty weight: 3400 lb (1542 kg)
- * Powerplant: 1 × Miller L-510 8-cylinder inline mounted at center behind pilot. Double propellers., 720 hp (537 kW) each

Performance:


- * Maximum speed: 308 mph (495 km/h)
- * Range: 600 miles (960 km)

Armament:

- * Three 0.50 cal (12.7 mm) machine guns
- * One 0.50 cal machine gun and 2x 20 mm cannons

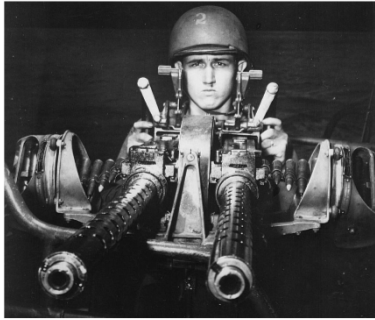


101



Work began on the *XP-57*, but financial problems at TAC slowed development and the company filed for bankruptcy in February 1941. The USAAC allowed the contract to lapse and TAC was acquired by *Higgins Industries* for the purpose of developing weapons, turret (left) and powerplant manufacture for the *Higgins Patrol Torpedo* (PT) Boats. Tucker served as VP with Higgins until 1943.

102



103

Part 2

Time Will Tell

104

Terms of Endearment

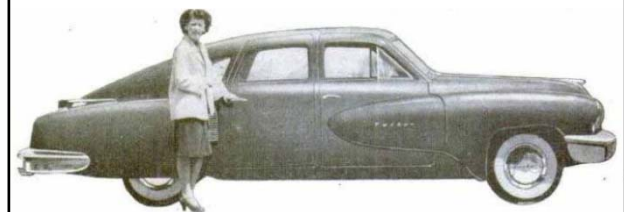
105

During Christmas 1946, *Preston Tucker* ordered the prototype ready in just one-hundred days. The time-frame was unheard of, but necessary to appease both his many critics and shareholders. Unable to obtain clay for a mock-up, Tucker's engineers and machinists (many from the race car industry) began beating-out sheet metal (an unorthodox approach) to form the prototype's shell. Contrary to persistent rumors, the prototype was dubbed "Tin Goose" by chief stylist *Alex Tremulis* as a term of endearment, not derogatorily (as some have suggested).

106

A Hand-Built Job

107



"...Now, after 15 years of experimenting and testing, Tucker is building a passenger car that embodies many racing-car ideas. The first Tucker - a hand-built job recently unveiled - is only 60 inches high...Door tops extend a few inches into the roof to provide additional headroom for a person entering the car..."

Popular Mechanics, September 1947

RE: for greater ease of entry and aerodynamics, aircraft-style doors extended into the roof which was only five-feet above the pavement. The frame allowed for the floor to be just 9-inches above the pavement, allowing the passenger to step-down into the vehicle as opposed to climbing up (as with most cars of the era).

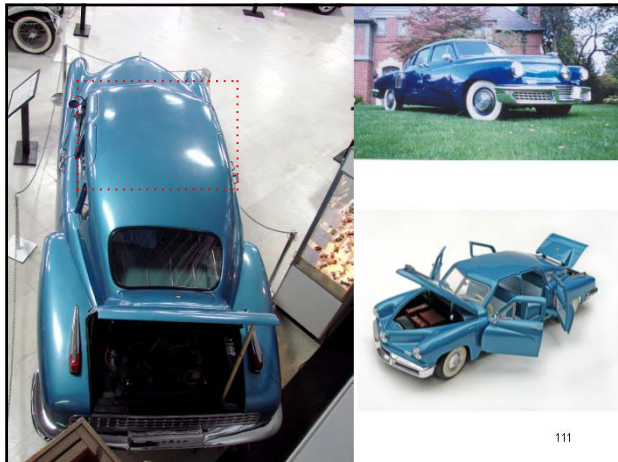
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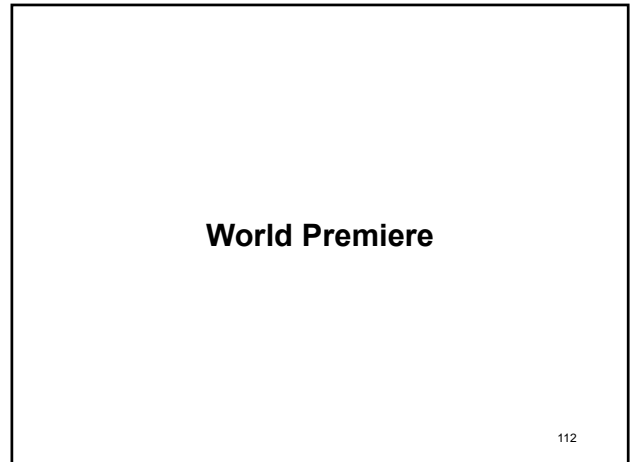
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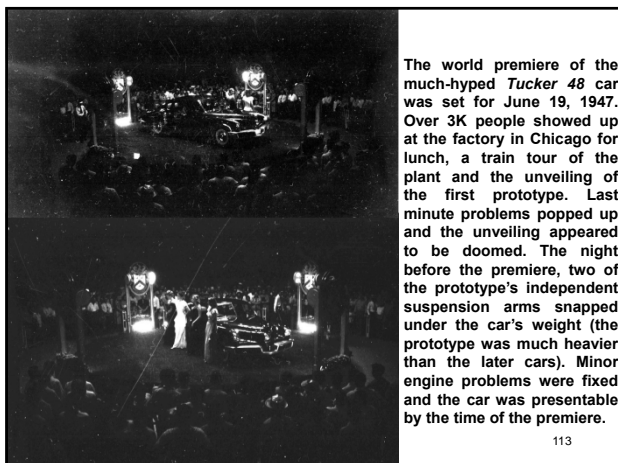
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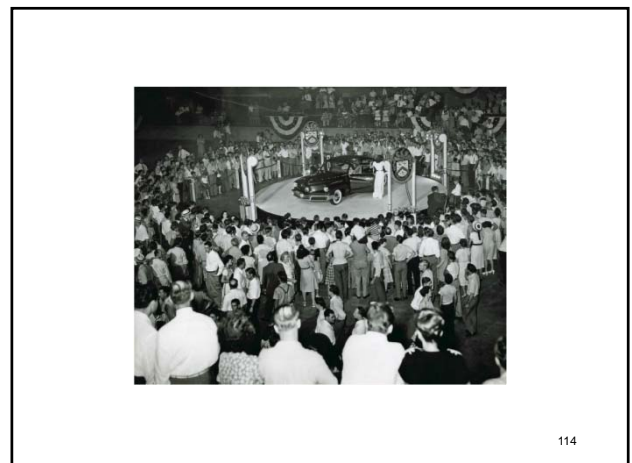


112



The world premiere of the much-hyped *Tucker 48* car was set for June 19, 1947. Over 3K people showed up at the factory in Chicago for lunch, a train tour of the plant and the unveiling of the first prototype. Last minute problems popped up and the unveiling appeared to be doomed. The night before the premiere, two of the prototype's independent suspension arms snapped under the car's weight (the prototype was much heavier than the later cars). Minor engine problems were fixed and the car was presentable by the time of the premiere.

113



114



However, the experimental engine was extremely loud (Tucker told the band to play as loud as possible to drown out the noise). Additionally, the high-voltage starter required the use of outside power to get the engine started, so Tucker had the engineering team keep the engine running during the entire event, fearing that the public would see how much effort was required to get the engine started.

115



116



As the car was driven on to the platform, the liquid coolant boiled over and some steam escaped from the car, but no one seemed to be too bothered, but one member of the audience was.

117



Drew Pearson, one of the top newspaper columnists at the time, reported publicly that the car was a fraud because it could not go backward and it went "goose-geese" going down the road.

118



119



Despite the fact that this problem was limited to the first prototype, the damage to the car's reputation was done and a storm of negative media followed.

120

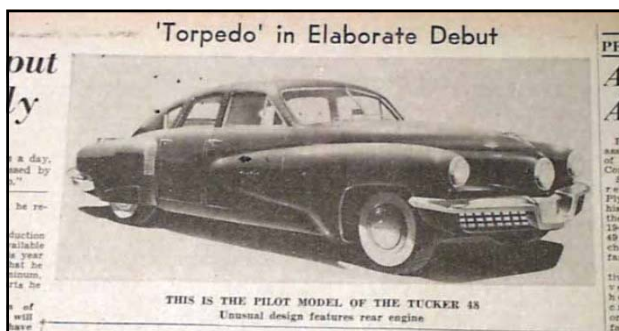


Above: the Tucker 48 premiered in the Tucker plant before the press, dealers, distributors and brokers. Tucker later discarded many of the prototype's features such as the 24-volt electrical system starter to turn over the massive 589 cubic-inch engine (for the premiere, workers substituted two 12-volt truck batteries weighing over 150 pounds that caused the Tucker's suspension arms to snap). Speeches dragged on as workers behind the curtain worked feverishly to get the prototype ready. Finally, before the large crowd, the curtains parted and the Tucker automobile rolled down the ramp from the stage to its viewing area where it remained for the rest of the evening.

121



122



Despite the problems and bad publicity of the unveiling, the car attracted much attention. Preston Tucker took the pre-production cars on the road to show them in towns across the country. The cars were an instant success, with crowds gathering wherever they stopped (Tucker was once pulled over by a police officer intent on getting a better look at the car). The Tucker 48's evolving appearance in the company's press releases and other promotional materials, combined with suggestive statements (such as "15 Years of Testing Produced the Car of the Year") would later be pivotal in the SEC filing mail and fraud charges against Tucker.

123



124



It was also becoming clear that many of the breakthrough designs Tucker called for and featured in their early advertisements could not be implemented (at least not at the car's projected selling price of \$2,450). The Ben Parsons designed flat-six (589 cu. in.) engine was proving troublesome, so the decision was made to fit production models with a Franklin six-cylinder engine. As well, an Alex Tremulis design for a fastback sedan body style (with conventional seating for six) was chosen for the final design.

125

Above: caption: "Franklin O-335 engine and Tucker Y-1 transmission"

Trial and Error

126

An air-cooled flat-six O-335 engine made by *Aircooled Motors* (originally intended for the *Bell 47* helicopter) fit in the rear engine compartment of the *Tucker 48* and its 166 hp was acceptable to Tucker who purchased four samples for \$5K each. His engineers converted the 335 cubic-inch engine to water cooling. The engine was heavily modified by Tucker's engineers, *Eddie Offutt* and Tucker's son (*Preston, Jr.*) at his Ypsilanti machine shop. Using an aircraft engine in an automotive application required significant modification thus, very few parts of the original *Franklin* engine were retained in the final Tucker engine. The modified engines were tested at maximum power for 150 hours; the equivalent of 18K miles at full throttle. In 1947, Tucker bought Aircooled Motors from *Republic Aviation* for \$1.8 million (to secure the engine source). At the time Tucker purchased Aircooled Motors (they continued marketing their engines under the "Franklin" name after the *Franklin Air-Cooled Automobile Company* changed its name to "Aircooled Motors" in 1937), the company held over 65% of post-war U.S. aviation engine production contracts. During WWII, Aircooled Motors was very successful producing helicopter and airplane engines.

127

Engine Specifications:
Horizontally opposed rear-mounted flat six cylinder engine
Aluminum block produced by *Aircooled Motors*
Bore: 4.5 in.
Stroke: 3.5 in.
Piston displacement: 335 cu. in.
Maximum horsepower: 166 b.h.p. @ 3200 r.p.m.
Maximum bmep: 200 p.s.i. @ 1800 r.p.m. (brake mean effective pressure)
Maximum torque: 450 lbs/ft @ 1800 r.p.m.
Piston speed @ max. r.p.m.: 1500 f.p.m.
Compression ratio: 7:1
Induction system: 2-bbl. Stromberg downdraft carburetor, mech'l. fuel pump
Exhaust system: Twin mufflers, 6 exhaust pipes
Electrical system: 6-volt battery/coil
Valves: OHV, hydraulic actuation inclined @ 70 degrees
Valve overlap: 0
Fuel feed: Direct fuel injection through rotating distributor pump; S-2 single plunger or S-3 multiple plunger systems. Pressure at nozzle; 100 to 200 p.s.i.
Operating oil pressure: 60 p.s.i.
Ignition: 12-volt system, Autolite distributor and low output coil
Firing order: 1-4-5-2-3-6
Weight (complete): 490 lbs.
Lbs. per cu. in.: 0.83

Transmission:
Type: 4-speed manual with Bendix vacuum-electrical preselector
Differential in unit with transmission.

Brakes:
Type: 4-wheel hydraulic drums, internal expanding
Drum diameter: 11 in.

128



129

Tucker needed a transmission to mate with the *Franklin O-335* engine. His team decided to try and adapt designs intended for front-engine/front-wheel-drive use. The *Cord 810/812* four-speed electro-vacuum manual transmission/s fit the design requirements and were used initially. However, they could not handle the power and torque of the O-335 engine (it sheared-off the teeth from first gear if the engine was raced excessively). In an effort to solve this problem, Tucker and his engineers modified it, installing stronger gears and lengthening the case.

130



The modified *Cord* transmission was named the "Tucker Y-1" (for "Ypsilanti-1") and was installed in most Tuckers. Both used a *Bendix* electric vacuum shift mechanism (without mechanical linkage to the steering column shift lever). These versions had problems with electrical connections and vacuum leaks that hindered shifting thus, a new design was required. A *Borg-Warner* three-speed automatic was tested and installed on car No. 1048, however, Tucker's ultimate goal was to design his own transmission for his own car.

Above L&R: caption: "Former home of Preston Tucker of Tucker Automobiles, in Ypsilanti, Michigan"

131

Tuckermatic

132

To solve the transmission problems with a new design, **Warren Rice** - creator of the much acclaimed *Buick Dynaflo* transmission, was consulted. A unique continuously variable transmission named the "Tuckermatic" was the result. It was strong enough to handle the O-335's power and torque and was a simple but effective design (with double torque con-verters and only 27 parts - about 90 fewer than what was typically required for an automatic transmission). The double torque converters allowed a continuously variable drive ratio with only one forward and one reverse gear (it used the torque converters to vary the transmission ratio based on load and engine speed).

133

Three versions of the *Tuckermatic* were made; the R-1, R-1-2, and R-3, ("R" for *Warren Rice*, its designer). The first version (R-1) was not installed on any of the final cars (it required the engine to be off in order to select a gear). The R-1-2 was improved by adding a layshaft brake to allow gear selection while the engine was running. The R-1-2 was installed on car Nos. 1026 and 1042 only. The R-3 version had further improvements including a centrifugal clutch (to help shifting between forward and reverse even further). However, it was never installed in any of the final cars.

134



Above: caption: "R-1-2 transmission (recovered from car No. 1042; note second torque converter on the end)"

135



Because the two torque converters on the *Tuckermatic* made the engine-transmission unit longer, the fuel tank in the *Tucker 48* had to be moved from behind the rear seat (left) to in front of the dashboard (for all Tuckers from car Nos. 1026 forward) despite the fact that only two of them actually had the *Tuckermatic* installed. However, this had the advantage of improving weight distribution in the car.

Left: caption: "Tucker Gas-Port"

136



Production models did away with seat belts (because Tucker Corp. VP *Fred Rockelman* felt they sent a message that the car was unsafe), four-wheel disc-brakes and the swiveling outboard headlamps (in the name of cost savings). The three-headlamp set-up remained, but the design was changed so that the central headlamp turned with the front wheels. Because volume production had yet to start, each of the cars produced; 51, counting the *Tin Goose* prototype (only about 35 had been finished by the time production ended and about 58 bodies, in total, were built) exhibited few differences, leading some to consider all Tuckers produced as prototypes.

137

The Three-Eyed Wonder

138

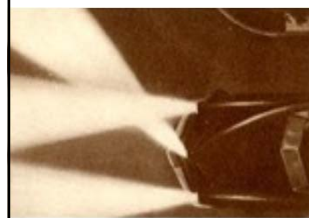


"...It has a third 'Cyclops Eye' headlight mounted in the center of the hood. This light is connected to the steering apparatus so that a beam of light turns and illuminates curves as the front wheels turn right or left..."

Popular Mechanics, September 1947

RE: the most recognizable feature of the Tucker 48 was a directional third headlight; the "Cyclops Eye," that would activate at steering angles of greater than 10-degrees to light the car's path around corners. At the time, seventeen states had laws against cars having more than two headlights (Tucker fabricated a cover for the center light for use in these states).

139



Caption: "Cyclops Eye - In addition to regular headlights, the Tucker has a center cyclops eye which turns with front wheels. Result: Your Cyclops beam is around the corner before you are, lighting the way ahead, giving you precious seconds to avoid accidents."

140



The Tucker 48 was easily recognized by the unconventional number of headlights (three) which included the signature "cyclops-eye" (which turned with the front wheels to illuminate the road ahead of the driver). Turn signals were provided (standard equipment nowadays, but, at the time, they were an extra-cost accessory). Lights - front and rear, were mounted to be visible from the sides at night (another present-day standard safety feature).

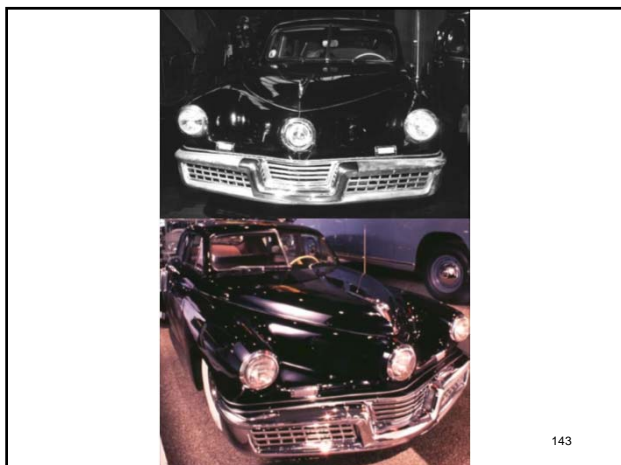
141



Preston Tucker's original idea called for the front fenders and headlights to turn with the wheels (above L&R), but this proved unfeasible (the turnable fenders would have acted like a rudder, making the car unstable at highway speeds).

Left: caption: "Eddie Offutt, Chief Engineer and test driver for the Tucker Corp., examines the 'cyclops' headlight"

142



143



Note the sign (highlighted) for "Tucker the 3 Eyed Wonder!" in the photograph at top and the Tucker 48 on the lot of a used car dealer in the photograph at bottom.

144



NO DRILLING!
NO SPECIAL TOOLS REQUIRED!

**AUTOMATICALLY CONTROLLED
FOG LIGHT**
by MESCO

INSTRUCTIONS

1. Replace front emblem by installing bulb assembly with 4 existing fastening screws, adjusting outer ring to bring beam to desired horizontal position.
2. Install tube assembly under head of existing radiator shell bolt.
3. With wheels and fog light pointing straight ahead, tighten clamp on pivot arm.
4. Install switch through bottom edge of dash in existing hole to left of steering column. Attach short wire to front right terminal of the head light switch. Run long wire through existing grommets and clips that now hold head light wires, then fasten wire to bulb terminal.

Manufactured by
MOTORCARS ENGINEERING SERVICE CO.
11501 W. 10th Ave. - Detroit, Mich. 48211

Left: an advertisement for an aftermarket center headlamp. MESCO - a Detroit-based company, offered this aftermarket headlight for the center of a 1949-50 Ford grille. A similar item was offered by a New Haven, CT, company called "The Swinging Eye" (also intended for '49-50 Fords). In the '30s, many aftermarket companies offered accessory headlamps that turned with the wheels, mostly for luxury cars. Installation required unbolting the grille's center medallion and bolting in the pivoting light. A control rod passed over the radiator support to a pivot-point connected to the end of the tie rod. Thus, when the driver steered the car, it would turn the headlight in the same direction.

147



Deja Vu All Over Again

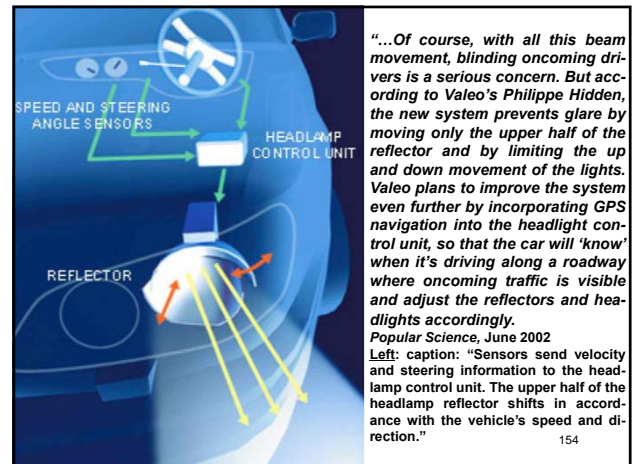
151

"When auto wizard Preston Tucker presented his legendary Car of Tomorrow in 1948, one of its most eye-catching features was a third headlight. This extra light turned with the car's front wheels, allowing the driver to see ahead when the vehicle went into a curve. The Tucker, of course, was never mass-produced, and a combination of factors, including expense and safety concerns, led automakers to largely abandon the idea. Until now..."
Popular Science, June 2002

152

"...Paris-based Valeo Lighting Systems, which once produced a turning headlight for French automaker Citroen, has resurrected the concept, with some major improvements. The new design uses a computer that registers steering wheel position and vehicle speed, then adjusts the upper half of the headlight reflectors accordingly. When the car turns, the light beam turns with it; and when the car speeds up, the lights elevate to allow the driver to see farther ahead. When the car stops at an intersection and the driver activates a turn signal, one of the lights turns toward the car's prospective path; the other follows the moment the wheels begin to turn..."
Popular Science, June 2002

153



"...Of course, with all this beam movement, blinding oncoming drivers is a serious concern. But according to Valeo's Philippe Hidden, the new system prevents glare by moving only the upper half of the reflector and by limiting the up and down movement of the lights. Valeo plans to improve the system even further by incorporating GPS navigation into the headlight control unit, so that the car will 'know' when it's driving along a roadway where oncoming traffic is visible and adjust the reflectors and headlights accordingly."
Popular Science, June 2002

Left: caption: "Sensors send velocity and steering information to the headlamp control unit. The upper half of the headlamp reflector shifts in accordance with the vehicle's speed and direction."

154

"...In the meantime, though the lights aren't yet allowed on American roads, Hidden estimates that the turning headlight system will begin appearing in European vehicles by the end of 2003."
Popular Science, June 2002

155

"More than 50 years after Preston Tucker had the idea, swiveling headlights are ready to shine. Audi and Mercedes are both developing the technology for production, though it's unclear if any of these vehicles will make it to our shores. With the Audi system, on the 2003 A8 in Europe, the headlights turn into corners in step with the steering wheel. Mercedes goes further by making speed a factor. Enter a corner fast, for example, and the swivel happens instantaneously; at low speeds, the headlights turn more slowly. Mercedes claims its system, which could enter production as early as next spring, improves traffic-lane illumination by 90 percent, and enables drivers to see 75 feet farther ahead than is possible with conventional headlights."
Popular Science, November 2002

156

AFS

157

"The bright blue-white light emitted by high intensity discharge (HID) xenon headlamps is a common sight throughout Europe, and the technology is rapidly gaining popularity in North America. Although HID lights have significant advantages over conventional halogen lights, the new lamps are also responsible for a dramatic increase in complaints to government regulators concerning headlight glare..."
eetimes.com, March 16, 2005

158

"...In an attempt to reduce glare, European authorities require automotive (HID) lighting to be equipped with automatic headlamp leveling systems. These systems compensate for changes in a vehicle's inclination relative to the road surface by making slight vertical adjustments to the headlamp's light beam..."
eetimes.com, March 16, 2005

159

"...The recent introduction of adaptive front-lighting systems (AFS) take adjustable headlamps a step further by swiveling the light beams in advance of the vehicle's turning. This places light into the turning radius, with the result that the driver's cornering visibility is dramatically improved..."
eetimes.com, March 16, 2005

160

"...Headlamp leveling systems keep light parallel to the road surface regardless of the vehicle's tilt. A vehicle may tilt as a result of a relatively slow-changing event, such as the filling of a fuel tank, or by a quick-changing event such as traversing a speed bump. In both cases, the headlamps must be maintained level with the roadway. Most headlamp leveling systems correlate their adjustment angles based on a variety of sensor data - in particular suspension compression data from the front and rear axles..."
eetimes.com, March 16, 2005

161

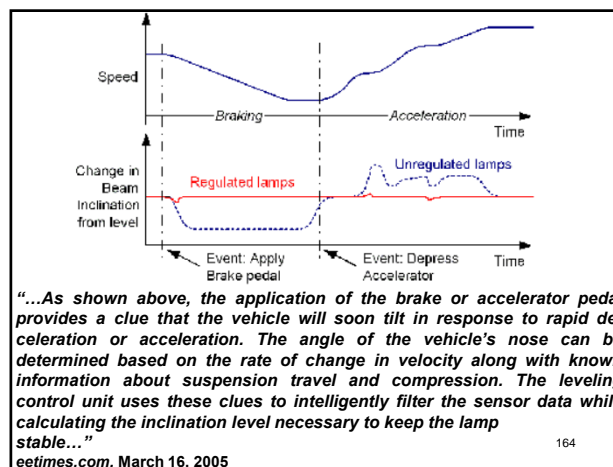
"...Most slow-changing events occur while the vehicle is stationary and the ignition off; events such as the addition or removal of a trailer, placing heavy loads in the trunk, or the entrance or exit of passengers. Clues that a slow-change event might soon occur also abound; for example, the opening of a trunk or rear passenger doors both give a pre-emptive indication that vehicle tilt may happen..."
eetimes.com, March 16, 2005

162

“...Some rapid-change events such as hard braking or acceleration also provide early warning clues. Together with suspension and yaw-rate data, these clues help the headlamp leveling system decide the timing and magnitude of adjustment required...”

eetimes.com, March 16, 2005

163



“...As shown above, the application of the brake or accelerator pedal provides a clue that the vehicle will soon tilt in response to rapid deceleration or acceleration. The angle of the vehicle's nose can be determined based on the rate of change in velocity along with known information about suspension travel and compression. The leveling control unit uses these clues to intelligently filter the sensor data while calculating the inclination level necessary to keep the lamp stable...”

eetimes.com, March 16, 2005

164

Gaze Point

165

“...The vehicle's data network also contains real-time sensor data on steering angle and wheel speed. Based on this information, AFS equipped headlamps can match the light distribution with the vehicle's turning angle so that upcoming curves and intersections receive maximum illumination, especially at the driver's gaze point. The significant increase in light helps reduce driver stress and fatigue and improves the ability to see obstacles that fixed-beam headlamps might not illuminate...”

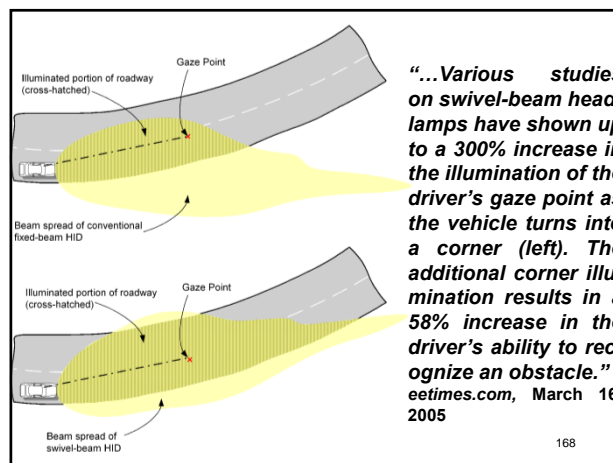
eetimes.com, March 16, 2005

166

“...On U.S. vehicles, steerable headlights are set-up to function only at speeds above 10 mph. The left-side headlamps, whose beams are focused lower to avoid blinding oncoming drivers, can swivel up to 15-degrees off the straight-ahead position in left turns, bends, or lane changes. Right headlamps only need to swing up to 5-degrees in right-hand turns since they have higher, farther-reaching beams...”

eetimes.com, March 16, 2005

167



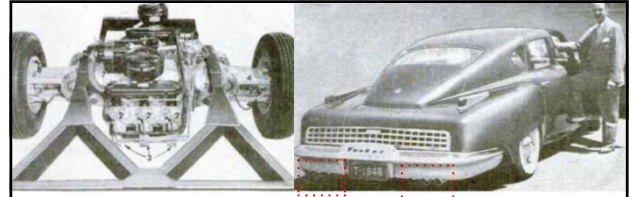
“...Various studies on swivel-beam headlamps have shown up to a 300% increase in the illumination of the driver's gaze point as the vehicle turns into a corner (left). The additional corner illumination results in a 58% increase in the driver's ability to recognize an obstacle.”

eetimes.com, March 16, 2005

168

The Future is Now

169



"...The Tucker's six-cylinder, 150-horsepower engine is mounted at the rear, directly between the rear wheels. The main parts are aluminum, making the engine 500 pounds lighter than conventional engines of comparable horsepower..."

Popular Mechanics, September 1947

Left: caption: "Main engine parts are identified: 1. Air filters; 2. intake valves; 3. Exhaust valves; 4. Wheel-suspension arms; 5. Propeller shaft; 6. Distributor; 7. Torque converters; 8. Disc-type brakes; 9. Intake manifold."

Right: caption: "Rear grille releases air that reaches engine through ports at front of back fenders. Six exhaust pipes permit individual gas analysis for each of the six cylinders." 170



Performance:

0-30 m.p.h. 3.5 sec.

0-60 m.p.h. 10.0 sec.

Top speed 119 m.p.h. (at Sebring, 1956)

171

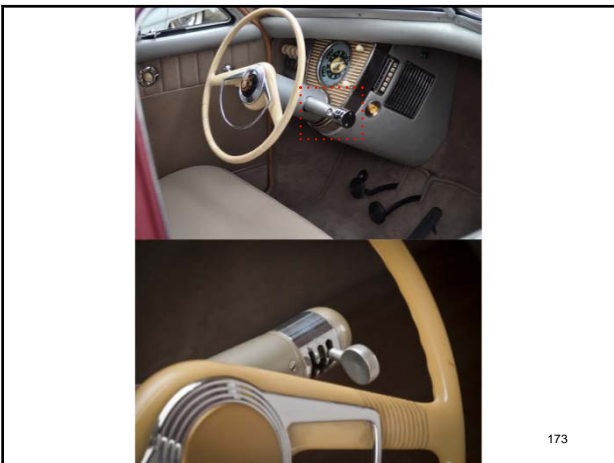


"...The Tucker is designed to cruise at 100 miles per hour and the speedometer registers up to 140. With fuel injection, high-frequency ignition, light weight and elimination of about 800 parts used in the average auto, the Tucker - its manufacturer predicts - will travel 35 miles per gallon of gasoline at moderate speeds..."

Popular Mechanics, September 1947

Left: Tucker 48 speedometer (120 mph max.)

172



173



174



175

E Pluribus Unum

176

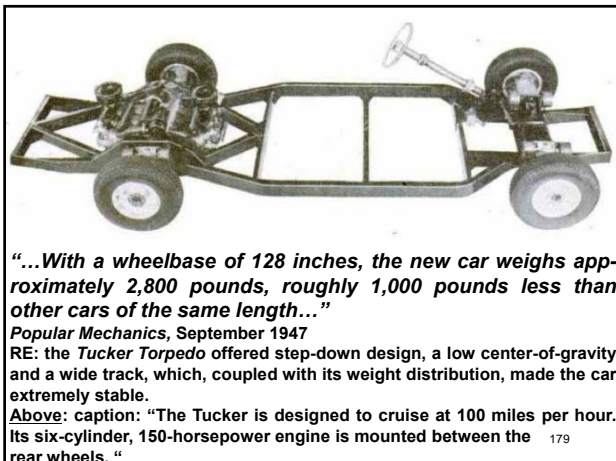


While performing a meticulous restoration of a *Tucker 48*, the restorer discovered that many Tucker parts were from other manufactured items. Specifically, while restoring the steering wheel, he came to the conclusion that the horn ring (left) was probably from a 1942 *Lincoln* (right). Considering the fact that *Preston Tucker* was building a car with a small initial production run, avoiding custom made parts as much as possible made a lot of sense.

177



178



"...With a wheelbase of 128 inches, the new car weighs approximately 2,800 pounds, roughly 1,000 pounds less than other cars of the same length..."

Popular Mechanics, September 1947

RE: the *Tucker Torpedo* offered step-down design, a low center-of-gravity and a wide track, which, coupled with its weight distribution, made the car extremely stable.

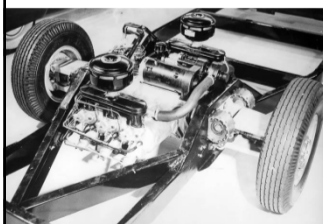
Above: caption: "The Tucker is designed to cruise at 100 miles per hour. Its six-cylinder, 150-horsepower engine is mounted between the rear wheels."

179

General Specifications:

Wheelbase:	130 in.
Front tread:	64 in.
Rear tread:	65 in.
Tire size:	7.00 x 15.00
Height:	60 in.
Length:	219 in.
Width:	79 in.
Weight:	4,235 lbs.
Fuel Tank:	20 gal.
Mileage:	18-19 m.p.g. (average)
Original price:	\$2,450 (projected, 1948)

180



Left: caption: "A photo of Preston's own 589 engine. This engine had no axles, transmission or driveline, as it was supposed to power a hydraulic pump that would supply oil pressure to a torque converter at each wheel."

181

A Few of Many New Engineering Features

182

Each Tucker built differed somewhat from the previous car, as each car built was basically a prototype where design features and engineering concepts were tried, improved or discarded throughout the production cycle. The door releases came from the *Lincoln Zephyr*. The steering columns were from the 1941 Lincoln, provided by the *Ford Motor Co.* (Preston Tucker held a patent for a collapsible steering column design). Tucker envisioned several other innovations that were later abandoned, including: magnesium wheels, disc-brakes, fuel-injection, self-sealing tubeless tires and a direct-drive torque converter transmission (all were evaluated and/or tested, but were dropped on the final prototype due to cost, engineering complexity and/or lack of development time).

183



184



Caption: "Rear Engine - 166 horsepower, flat opposed six-cylinder engine located below the level of passengers. Aluminum alloy construction. More power for the weight of the car than any volume production automotive engine ever built. Eliminates fumes, heat, noise in passenger compartment."

185



Caption: "Precision Balance - The unique Tucker design distributes weight to give maximum safety, maximum power transmission, feather-light steering and driving control, and - for the first time - insures complete four-wheel traction in braking. Only a rear engine car can achieve this precision balance - for years the goal of all automotive engineers."

186



Caption: "Frame Lower Than Center Line of Wheels - An exclusive feature made possible by locating engine in rear and eliminating conventional drive shaft. This, combined with Tucker suspension system, greatly reduces chances of skidding or over-turning."

187



Caption: "Tucker Ignition - A hot, lasting, ignition spark. All the gas in the cylinder is ignited every time. A satisfactory answer to engine 'pings' and power knocks. Real assurance of all-weather push button speed in starting."

188



Caption: "Individual Wheel Suspension - The new Tucker individual rubber torsional wheel suspension cushion each wheel by its own resilient action arm, actually erasing shock instead of simply softening it. Also eliminates all gyroscopic forces which frequently cause conventional cars to veer with wind, and weave or pitch at turning speeds."

189

Not the Eating Kind

190

"...Each of the four wheels is individually suspended by heat-treated aluminum forgings that act independently when the car goes over obstructions or rough roads. Rubber assemblies replace leaf or coil springs. Up-and-down motions of the suspension arms are controlled by rubber 'biscuits' fastened to the frame. Inside these biscuits, metal disks are bonded to rubber with bars extending to each side of the suspension arms..."

Popular Mechanics, September 1947

RE: suspension designs (especially the front suspension) had to be changed throughout development of the car. Rather than springs, Tucker used an elastomeric (rubber) four-wheel independent suspension (similar to that used on the race cars he and *Harry Miller* designed/tested at the *Indianapolis Motor Speedway*). The rubber elastomers were developed with assistance from the *Firestone Tire Company* (Firestone used a special *Vulcanization* process to produce a specific spring rate).

191

Tucker's suspension designs were plagued with severe stiffness throughout development, which, while good for handling, caused front-wheel corner lift when cornering on uneven surfaces. The test-bed and the prototype had a double-rubber disc-type front and rear suspension, similar to Miller's race cars (it was too weak for the weight of a passenger car). On cars Nos. 1001 and 1002, the rear wheels could not be removed without removing the fender or suspension due to the stiffness of the suspension and the rear wheel "arch fender" design. From car Nos. 1003 forward, the rear fender shape was changed so the tire could be removed more easily. Aside from the fender changes, the rear suspension remained the same from car No. 1001 forward.

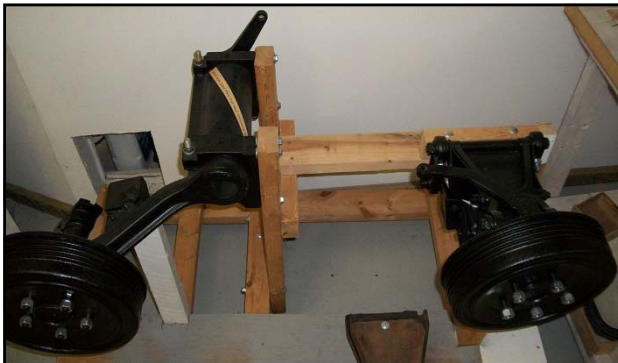
192



Above: caption: "Tucker Rubber Torsion Tube (version No. 2) - front suspension used on car Nos. 1026 on. This unit taken from car No. 1046 for V8 conversion." 193

Three versions of the front suspension were installed in the cars (aside from the rubber-disc style used on the prototype). Cars Nos. 1001 and 1002 used a rubber torsion tube design, which suffered from severe toe-in during heavy braking. Tucker then switched to a rubber sandwich type suspension (with a rubber block sandwiched between the upper and lower A-arms). However, on cars Nos. 1003 thru 1025, this type was severely stiff. Starting on car No. 1026, Tucker finally settled on a suspension design with a modified version of the rubber torsion tube thus, correcting the toe-in braking problem.

194



Above: caption: "Tucker rear suspension rubber torsion tube (left) and sandwich-type front suspension (right) - used on car Nos. 1001-1025" 195

For Safety's Sake

196

"There was plenty of room inside the car. The front seat and the back seat were the same width, and comfortable. All of the instruments were clustered right in front of the driver. It had a padded dash, and a windshield that would pop out on impact. A heavy bulkhead protected the driver and those in the front seat. We called it a crash compartment. The rear of the front seat was also padded to prevent injury to rear seat passengers."

Eddie Offut, Chief Engineer - Tucker Corp.

RE: the Tucker 48 included many previously unknown safety features, including the cavernous cushion-edged "crash chamber" that replaced the standard dashboard. The company sales department had a particular dislike for this feature feeling the stripped down interior was too barren to appeal to customers (the front and rear seat cushions were interchangeable to eliminate wear of the cloth seats). The Tucker's instrument cluster was directly in front of the driver thus, no knobs threatened a front seat passenger in the event of a collision. A glove box was added to the front passenger door panel instead of the more conventional location (in the dashboard) to provide space for the crash chamber. The Tucker could seat six adults comfortably. As a security feature, the car's parking brake had a separate key so it could be locked in place to prevent theft.

197



"...Safety is emphasized in the design. A sponge-rubber crash panel, covering the entire dash and front passenger compartment, acts as a cushion in case of accidents. Gauges, instruments and electrical controls are mounted between the steering wheel..."

Popular Mechanics, Sept. 1947

Left: caption: "Designers say straight-sided wheel is easier to hold. Instruments are directly below the wheel."

198



199

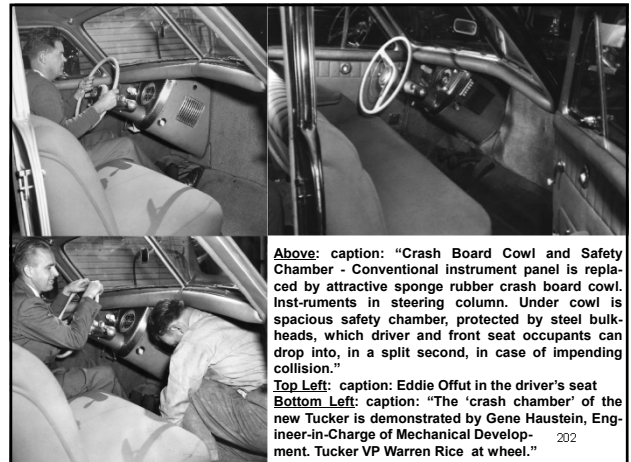


200



Caption: "Crash Board and Safety Chamber" - Conventional instrument panel is replaced by attractive sponge rubber crash board cowl. Instruments in steering column. Under cowl is spacious safety chamber, protected by steel bulkheads, which driver and front seat occupants can drop into in a split second, in case of impending collision."

201



Above: caption: "Crash Board Cowl and Safety Chamber - Conventional instrument panel is replaced by attractive sponge rubber crash board cowl. Instruments in steering column. Under cowl is spacious safety chamber, protected by steel bulkheads, which driver and front seat occupants can drop into, in a split second, in case of impending collision."

Top Left: caption: Eddie Offut in the driver's seat
Bottom Left: caption: "The 'crash chamber' of the new Tucker is demonstrated by Gene Haustein, Engineer-in-Charge of Mechanical Development. Tucker VP Warren Rice at wheel."

202



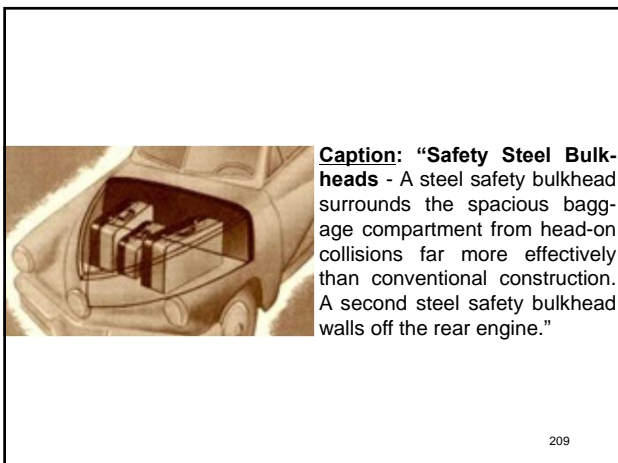
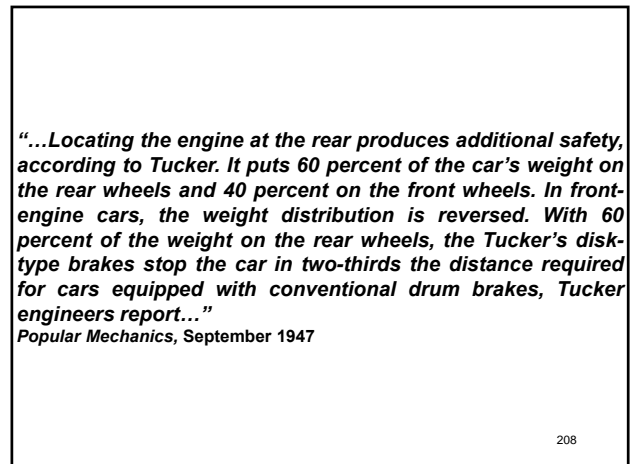
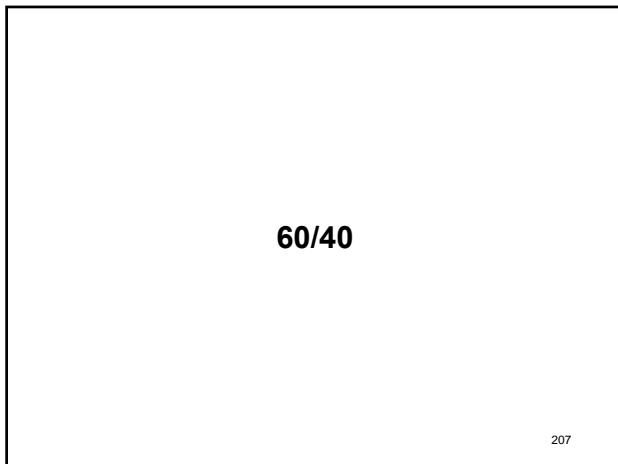
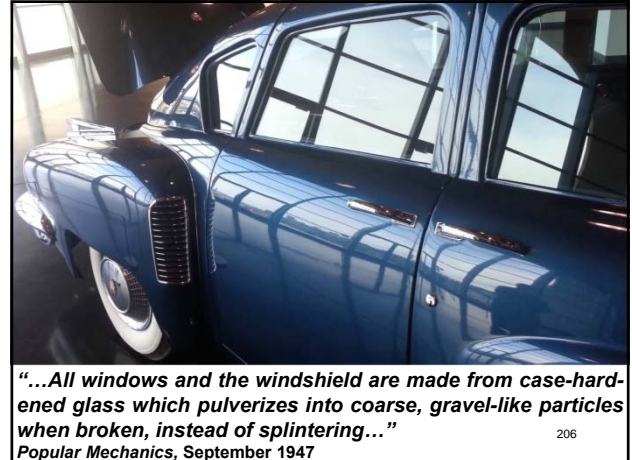
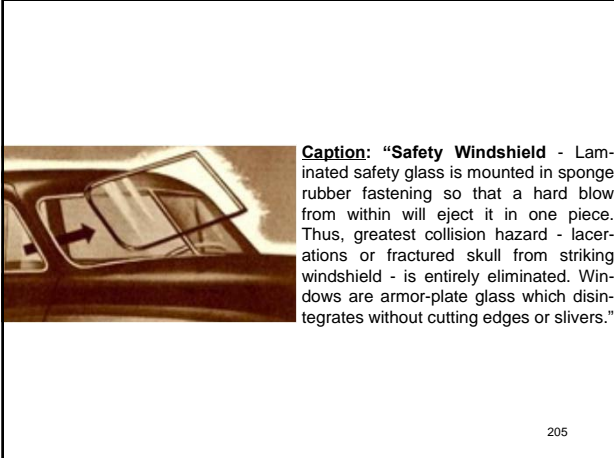
203

"...The windshield is held in place by channels designed to give way and let the entire piece of safety glass push out, if a crash hurls the driver or passenger forward..."

Popular Mechanics, September 1947

RE: the safety glass windshield was designed to "pop-out" on impact

204



To Assure a Quick Stop

211

"...The disc brakes are similar to those used on some air-planes to assure a quick stop after landing. A single aluminum disk between two friction surfaces provides much greater braking area than drum-type brakes, Tucker explains. Instead of re-lining disk brakes, the entire brake assembly on the new car can be replaced when necessary..."
Popular Mechanics, September 1947

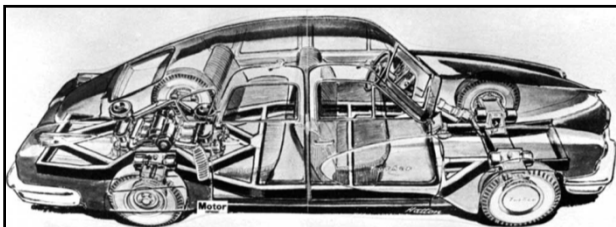
212

Safety Frame

213

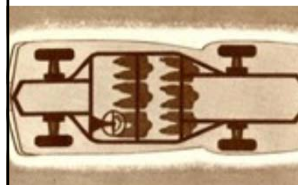
"The gasoline tank was mounted in the center of the car, where it was protected by the frame from impact on all sides. The steering felt like it was power steering...quick and easy, because we came up with the idea that by placing the king pins in the vertical center of the wheels, it would eliminate problems conventional cars had. The steering box was well protected and mounted far back in the frame."
Eddie Offut, Chief Engineer - Tucker Corp.

214



Above: caption: "Tucker 48 - Cutaway View." A perimeter frame surrounded the vehicle for crash protection (a roll bar was integrated into the roof. The steering box was behind the front axle to protect the driver in the event of a front-end collision. The Tucker's front/rear bumpers were made of heavy spring steel and angled forward from the edges to the center of the car to deflect objects on impact. Both the engine and transmission were mounted in a separate sub-frame

215



Left: caption: "Safety Frame Surrounding Passenger Compartment - Vital protection against injury in case of collision. And protection for car, too, because frame is tapered front and rear like the prow of a ship. Thus a slanting bow - as in 90% of all collisions - is deflected sideways with minimum damage."

216

A Word to Women

217

"The Tucker is built with women's own particular needs in mind. When you drive, you frequently have children in the car. Tucker safety features give you the EXTRA protection that means peace of mind in traffic and on the highway. For they help you avoid accidents as well as give you and yours added security in case of unavoidable mishaps. You'll glory in the effortless ease of driving the new Tucker. It has true fingertip steering control. Ordinary traction jolts and jars are either eliminated or unbelievably softened. There are no fumes or heat to bother you because the engine is in the rear and relax. A 'shopper's shelf' behind the rear seat, designed specifically for your parcels. 'No-stoop' doors that open up into the roof for graceful entrances and exits...even when wearing your frilly new hat. Yes, when you see the new Tucker it will be a case of love for life. For the Tucker combines pulse-stirring beauty of line with the very things you've always wanted in a car.

NOTE: This folder highlights only a few of the new and exclusive features of the Tucker. There are many others now being refined, improved, and adopted for mass production. Consequently the Tucker Corporation must reserve the right to make mechanical changes."

RE: excerpt from a *Tucker 48* brochure entitled *Step into a New Automotive Age in the Rear Engine Tucker*, which highlighted many of the new car's innovative engineering and safety features

218

Improved Roadability

219



"...Advantages of the rear engine listed by the engineer include improved roadability and elimination of engine odors and noises..."

Popular Mechanics, Sept. 1947

Above: caption: "Preston Tucker, designer and builder of the convention-defying car, demonstrates how the space under the hood is utilized as a luggage compartment"

220



221

Coefficient of Expansion

222

"...Advantages of the rear engine listed by the engineer include improved roadability and elimination of engine odors and noises. The block and head are made from a single aluminum casting and since the block and pistons have the same coefficient of expansion, Tucker predicts that his engine will give trouble-free service three times as long as ordinary engines with cast-iron or steel-sleeved block. In the conventional engine, Tucker declares, the pistons expand about eight times as much as the piston wall, causing wear and eventual oil pumping..."

Popular Mechanics, September 1947

223

Horizontally Opposed

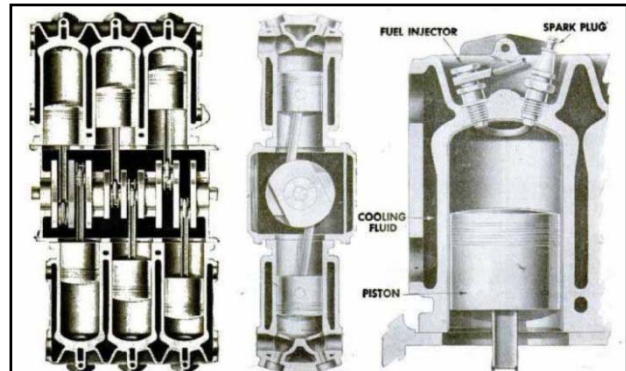
224

"...The six cylinders are opposed but slightly offset, with a six-throw crankshaft that has four main bearings. Valves are operated by a hydraulic mechanism. If the oil supply gets low, the valve mechanism shuts off the engine to prevent any damage..."

Popular Mechanics, September 1947

RE: the powerful Tucker rear-mounted engine allowed the *Tucker 48* to go from 0 to 60 mph in 10 seconds, cruise easily at 100 mph and, allegedly, reach 131 mph (in 1956, it was clocked at 119 mph).

225



Above: caption: "Six-throw crankshaft and four main bearings are shown (left) in cutaway view. Center, cross-section drawing of horizontally opposed cylinders. Right, cross-section view of cylinder shows fuel injector and spark plug."

226

Keeping Cool

227

"...The engine is cooled by a sealed liquid system, with Prestone providing a temperature range from 250 degrees above zero to 50 below. Thermostats will keep the engine temperature at approximately 210 degrees which Tucker considers ideal..."

Popular Mechanics, September 1947

RE: the first Tucker engine was air cooled (developed by *Aircooled Motors* of Syracuse, NY). After the engine was converted to water cooling, the Tucker engine became the auto industry's first sealed engine cooling system.

228



"The engine was in the rear. It was an opposed, six cylinder engine...mostly aluminum...very light, very durable, and an excellent performer. Later, we would have gone to an air cooled engine, but the cars we built had water cooled engines."

Eddie Offut, Chief Engineer - Tucker Corp.

Top: caption: "A Tucker rear mounted engine exposed during restoration"

Bottom: caption: "The exterior parts of the engine were either polished, or chrome plated"

229

"They gave me three months to get the job done, and I had to start from scratch. We had to work out a proper camshaft configuration, and we had to put a water jacket on that air cooled engine block and heads. We just shoved up our sleeves and went to work. Most of the engine was aluminum. I can remember we used Mrs. Tucker's stove at Ypsilanti to heat the aluminum blocks so we could slip in the steel cylinder liners, which we packed in dry ice so they would shrink and make a tight fit. It was only 45 days after we went to work that we started the first engine. It was a unique engine...smooth and superior to most of the engines around. But I guess we were just 25 years ahead of our time."

Eddie Offut - Chief Engineer - Tucker Corp.

230

Interchangability

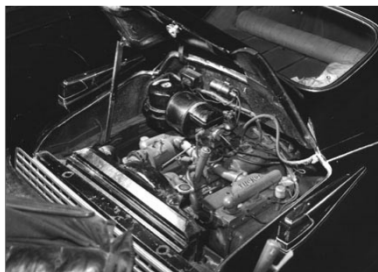
231

"...Mounted by only four bolts, the engine can be replaced in the manner of a storage battery in less than an hour. Air-plane-type connectors for electrical, gasoline, oil and hydraulic lines can be unfastened in a single operation..."

Popular Mechanics, September 1947

RE: weighing just 320 pounds, *Preston Tucker* promised potential customers that the engine could be removed and replaced by three men in just 18 minutes

232



233

Out With the Old, In With the New

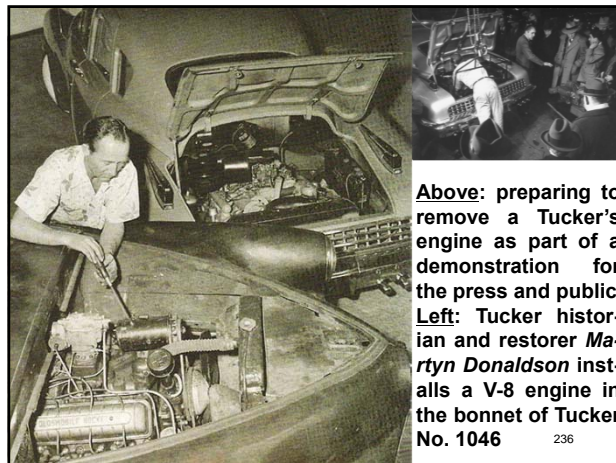
234

"...Under the service plan, Tucker dealers will keep a number of replacement engines on hand. When a Tucker owner brings his car in for engine repair, the old engine will be removed and a replacement engine installed so the car will be ready for use in an hour. Then the old engine will be sent to the factory for servicing..."

Popular Mechanics, September 1947

RE: potentially, a Tucker owner with an engine in need of repair could exchange it for a loaner to keep the car in operation (and the customer happy)

235



Above: preparing to remove a Tucker's engine as part of a demonstration for the press and public
Left: Tucker historian and restorer Martyn Donaldson installs a V-8 engine in the bonnet of Tucker No. 1046

236

"It wouldn't do much good to name names, but I've got a good idea what happened to the Tucker operation. There were all sorts of rumors about the car, but one fact got out which really shook the industry. We could change the Tucker engine in less than 15 minutes, and that's a fact. We could, and did, drive the Tucker into a garage, and in less than 15 minutes, drop the old engine, install a new one, and drive it away. I did it seven times myself, in less than 12 minutes. That one fact, I believe, caused us all the trouble with the big boys. With their cars, it was completely impossible to change engines in half a day. I believe, once they realized we had an engine we could change that quickly, they might have believed we had a car to go with it. And we had a car to go with it, but I guess we were about 25 years ahead of our time."

Eddie Offut, Chief Engineer - Tucker Corp.

237

Humplless

238

"...In the Tucker engine the conventional power-transmission assembly is eliminated; in its place, hydraulic torque converters transmit power from both ends of the crankshaft to the rear wheels. This does away with transmission, clutch, drive shaft and torque tube, full-width rear axle and conventional differential. The Tucker has no drive-shaft tunnel to make a hump on the floor..."

Popular Mechanics, September 1947

RE: Tucker and his designers regarded the drive shaft of contemporary cars as a relic of marine engineering, referring to it as a propeller shaft robbing a car of valuable interior space and forcing passengers to ride on top of a vibrating shaft that had to be "tranquilized"

239

HERE'S WHY THE TUCKER '48 IS YEARS AHEAD!

Tucker '48

PHILADELPHIA TUCKER COMPANY

336 NORTH BROAD STREET, PHILADELPHIA, PENNA. PHONE: MU 6-7400

"Now FLOWING Power. Flowing power - sure as a mighty stream - moves direct from engine to wheels through double hydraulic torque converters. No conventional transmission or clutch...or conventional differential, either. And power goes to both drive wheels. So it's impossible to be stalled by one wheel spinning on ice...elimination of over 800 parts of conventional cars to give you a new standard of value..."

RE: excerpt/s from a Tucker '48 advertisement which appeared in Philadelphia's *The Sunday Bulletin*, on April 18, 1947

240

"Most of the cars we built were fitted with vacuum electric-shifting Cord transmissions. But we had an automatic transmission ready to go. We would have had disc brakes as standard equipment also, before too long."

Eddie Offut, Chief Engineer - Tucker Corp.

RE: the electric shifting transmission would start easily with a little push, in case of trouble. The planned automatic transmission also would have started with a little shove, instead of having to be pushed 30-35 mph. Another improvement planned was disc brakes.

241



"The Tucker was a great idea. If it hadn't been, I wouldn't have stayed around. It had so much to offer then...great looks...different looks, but that was just part of it. We had torsimatic suspension...torsion bars mounted in rubber on all four wheels, and with the spring setup, the car rode and handled beautifully. It did not have shock absorbers."

Eddie Offut, Chief Engineer - Tucker Corp.

RE: Offut worked with Harry Miller and Leo Goosen in developing the Miller Engine, from which the basic design is embodied in the turbocharged "Offy" engine in modern-day race cars. Offutt also did most of the work in converting the air-cooled Franklin aircraft engine, which powered most of America's early helicopters, into a liquid cooled engine for the Tucker 48.

242

Safe at Any Speed

243

"...To increase safety and driving ease, the 13-inch wheels (which carry 7.00 by 13 tires) have a 1/32-inch toe-in in front and 1/16-inch toe-in in the rear. The front wheels have a special mounting which Tucker says will eliminate any swerving if a front tire blows out at high speed..."

Popular Mechanics, September 1947

244



"It steers so easily, and is so comfortable. It rides very smoothly, and the braking is excellent. It is a roomy car, and there is no noise or vibration in the passenger compartment. It would still run 100 miles an hour, and do it in a hurry, if you want to push it that fast..."

Bill Goodwin

RE: Goodwin, a mortician, owns the Goodwin Auto Museum in Frankfort, Indiana and, among his collection of Duesenbergs, Cords and other classic cars, is a Tucker 48 he affectionately calls "Goldie" (above). Goodwin has owned the car since 1968.

245



"...I believe the public would have bought the Tucker. I was very interested in the car in 1948, but couldn't get one. It has excellent design, and some great ideas. Really, there just aren't too many cars around you can compare it to today."

Bill Goodwin

246

Well...Almost

247

"When we brought the cars to Indianapolis, Preston's instructions were to give the suspension a good test, evaluate the general handling and economy, and not to go for a speed run. We knew that, driving at 50-55 miles an hour, we could get a consistent 20 miles per gallon. We kept one of the cars running, day and night, for nearly two weeks and they piled up a minimum of 4,000 miles each. One car, I believe, topped 5,000 miles. We ran them about 85 miles an hour...sometimes a little faster for short spurts, but we never did go all out for speed in that test. I'll tell you...the suspension really got a test. The track was really rough then. The entire straightaway was all brick, and it wasn't nearly as smooth anywhere as it is today. But not a single part of the suspension failed, and the only parts on the car that did fail were really minor."

Eddie Offut, Chief Engineer - Tucker Corp.

248



"The Tucker crew was efficient and sharp. All of them knew their business, and there was no foolishness. All of us who were working out there really gave those cars a look. They were so far ahead of anything else...ten years at least. I would like to have owned one."

Bob Cassady, Firestone Racing Division

RE: In 1948, Cassady was a part-time Firestone employee when the Tucker was tested at the Indianapolis Motor Speedway

Left: caption: "The Tucker crew at Indy, 1948"

Right: on April 2, 1974, William Goodwin, owner of the Goodwin Auto Museum in Frankfort, Ind., brought Tucker car No. 9 to the Speedway for Mario Andretti and Al Unser to test drive

249



"I drove a lot of the 1940's and 1950's model cars. Not one of them showed me a thing like that Tucker did today. It had to be way ahead of anything of those days."

Al Unser

"I believe the public would have bought these cars"

Mario Andretti

250



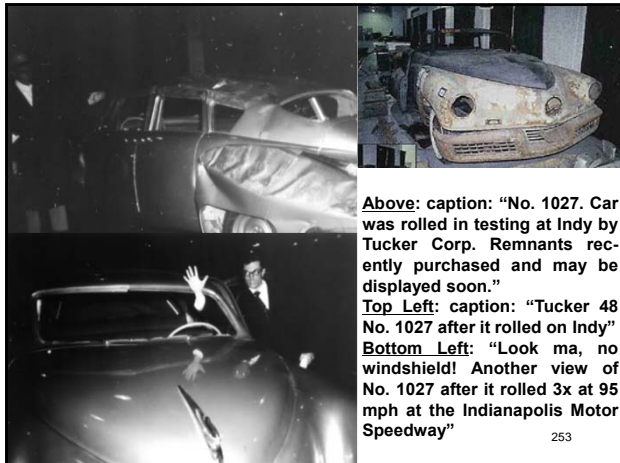
251

"It was never my understanding that Preston was going after publicity in this Indy test, so the testing was done secretly. I thought it went swell. Well...almost. One night, September 23, 1948, I was scheduled to drive on a run, and before I went out, I felt all the tires with my hand, and they felt fine to me. I must have missed a flat spot, because at about 5 a.m., I was going through the third turn, and I blew a tire. I had it pretty well under control, although I was up on the two right wheels. One of the doors popped open on the right side and dug into the track, and I flipped about three times. The windshield popped out, just like it was supposed to, and all I got was a bruised knee. We changed the blown tire, and drove the car back to the pits. Right after the crash, we loaded up and went back to Chicago."

Eddie Offut, Chief Engineer - Tucker Corp.

RE: to prove the road-worthiness of his cars, Preston Tucker and his engineers ran several Tucker cars at the Indianapolis Motor Speedway in several endurance tests. During this testing, car No. 1027 was rolled three times at 95 miles per hour and the driver (Offutt) walked away with some bruises. During the crash, the windshield popped out - as intended, verifying this safety feature to be effective. Afterwards, upon replacing a damaged tire, the car started up and was driven off the track.

252



"Of all the cars built in America then, we had the best piece of equipment. Of course, with any new car, we had some problems to work out, but we never got the chance...Tucker, as a person, was an honest individual. He was a promoter and a super salesman type of guy, and he might have stretched the truth here and there, but I never had any dealings with him which were dishonest, and I had known him since he was a young man."

Eddie Offut, Chief Engineer - Tucker Corp.

254

100K or Bust

255



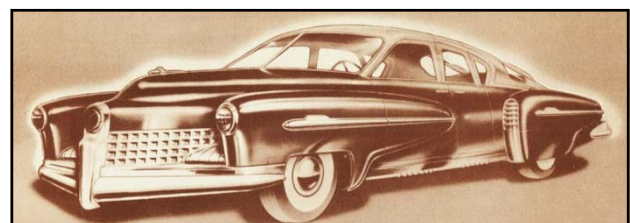
"...Tucker says the major operating parts - such as bearings with sealed-in lubricant - will require no repairs for 'at least 100,000 miles.' If the Tucker does everything its creator claims, it may revolutionize the automobile industry. Time will tell!"

Popular Mechanics, September 1947

256

The Car You've Been Waiting For


257



The Tucker '48...The Car You Have Been Waiting For

Caption: "You've waited long years for a really new car. Here it is...completely new, yet with engineering principles completely proved in 15 years of rigid tests. Yes, and you've waited for a car that would give you as much for your money as before the war. The Tucker '48 does that and more. It's finer, more luxurious than the most expensive cars of today, yet priced in the medium field. It has a 128-inch wheelbase, is 5-feet high from road to roof, and delivers 30 to 35 miles per gallon at moderate driving speed. Later this very year, this exciting new car will be ready to drive...ready to give you the motoring thrill of your life. Be among the first to give it a workout. You owe it to yourself to get acquainted with a car so completely new in line and design...so completely proved in engineering principles...that it will still be a leader many years and thousands upon thousands of miles from now."

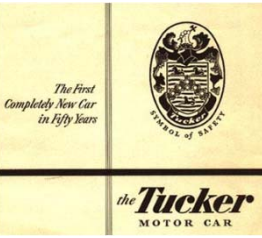
258



**The Leader in Fine Car Styling
for Years to Come**

Coming or going, you're one of a select company in a Tucker. From the searching, night-time vigilance of the steerable Cyclops Eye headlight to the sparkling beauty of the rear-engine grill and individualized exhaust pipes below, the Tucker is pure joy to own, to drive, to show your friends.

259



Original Tucker paint colors:

- Black
- Waltz Blue
- Green
- Beige
- Grey (Silver)
- Maroon

Original Tucker interior trim colors:

- Green
- Blue
- Beige

260





265



266



267




268



269




270



THE TUCKER '48
"THE CAR YOU HAVE BEEN WAITING FOR"

Preston Tucker was one of the most recognized figures of the late 1940s, as controversial and enigmatic as his namesake automobile. His car was hailed as "the first completely new car in fifty years" and the advertising promised that it was "the car you have been waiting for." However, less complimentary critics saw the car as a fraud and a pipe dream. Tucker's many innovations were, and continue to be, surrounded by controversy. Failing before it had a chance to succeed, it died amid bad press and financial scandal after only fifty-one units were assembled. 271


The First Completely New Car in Fifty Years-



272

Above: caption: "Yes, the Tucker is the most exciting car of the year, and for years to come. It is completely new in engineering principle, yet completely proved in more than fifteen years of rigid tests. Everything about the car is a clean break with outmoded tradition. The engine is in the rear, between the rear wheels where engine power is needed. It's a new kind of engine, too, bringing motorists for the first time the many im-provements in design developed and proved by American leaders of aviation. From Preston Tucker's years of designing special cars for the Indianapolis speedway comes a unique system of safety features universally applauded by traffic and safety experts. And also from Tucker's Speedway designs come tested principles of design simplification which eliminate many cumbersome and costly parts of the conventional car. Only mass production on a scale to match the vast resources of the Tucker plant, the largest and most modern automotive plant in the world, can bring this car to American motorists in the medium priced field."


QUESTIONS & ANSWERS
about the Tucker



Q. Who is Preston Tucker?

A. Preston Tucker is President of the Tucker Corporation and one of the nation's top designers and builders of special cars.

For years he worked with the late Harry Miller in developing special cars for the Speedway. In 15 years Miller Specials won eleven of the Indianapolis Speedway Clinics, recognized as the world's greatest racing grounds for automotive progress.



Q. Where can I obtain service on a Tucker?


A. There are more than 2,000 authorized Tucker Dealers from coast to coast in all principal cities and most smaller ones. These Tucker Dealers will have complete stocks of parts and trained mechanics for Tucker service and they will be fully supported by the factory service organization.

At Indianapolis the pit of the Miller Special was always the center of interest for motor car manufacturers. But many of the features developed by Preston Tucker could not then be produced in mass production factories without scrapping tools and dies worth millions. Now, starting from scratch in an ultra-modern plant, this completely new car is possible.

Over the years Preston Tucker developed and refined many of the features American motorists now get for the first time in Tucker.

Q. In what plant is the Tucker being built?

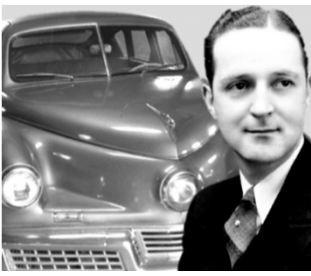
A. In the Tucker plant in Chicago, the largest, most modern plant in the world. It was built during the war to turn out B-29 engines. Automotive men laid it out for the most economical production and the government equipped it with the latest tools and machines—it is ideally suited for producing a completely new car.



Q. When and where can I get my Tucker and how much will it cost me?

A. You will be informed—and kept informed—by Tucker advertising in national magazines and your local newspapers, beginning as soon as this information is ready for release.

273



274

Part 3

Posterior Powered

275

The Pleasure Car Principle

276

"The entire principle of the pleasure automobile ought to be changed. The engine should be in the rear to eliminate the long drive shaft, torque tubes, and miscellaneous rods under the body. It should be radically streamlined, have faster hydraulic brakes, and be lightened. We are definitely headed for a lighter car that will stop and start more readily. It takes considerable horsepower to start a heavy car. Lighter ones will be more economical and safer."

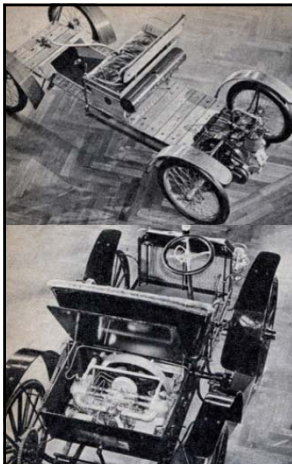
Harry Miller (1943)

RE: Preston Tucker - no stranger to the Indianapolis Motor Speedway, was friends with Wilbur Shaw, Eddie Rickenbacker, Ralph DePalma and the Chevrolet Brothers (Gaston, Arthur and Louis). Through Miller, Tucker met Miller's protege Eddie Offutt. Tucker also met Gene Haustein at Indianapolis - both important players in the future Tucker Corporation. There's no doubt that Tucker and his engineers were heavily influenced by Harry Miller, a man Tucker greatly admired.

277

Front Engine Fever

278

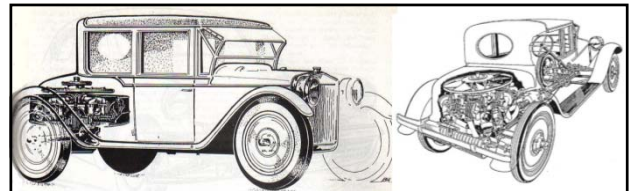


"Whenever the subject of rear-engine cars plays across the auto columns of the nation's newspapers, a certain bunch of boys in Detroit snicker to themselves! Rear-engine cars! Not for the American public, they say. And they ought to know. They're the head stylists and engineers for General Motors Corporation. Why are they so convinced? They know this rear-engine stuff isn't new at all. In 1902, 18 out of the 23 automobiles in production had their engines placed aft. But then gradually the engineers were overcome with violent symptoms of front-engine fever. They wanted to put the motors up front! And they said they had good reasons for doing so..."

Mechanix Illustrated, April 1949

Left T&B: caption: "The Orient Buckboard, that racy number at the top of the page, was one of the first cars to feature rear-engine drive - back in 1903. The 1909 Schact, bottom of page, had an opposed-type motor like the Tucker."

279



"...Safety was one of these reasons and better weight distribution another. They got their way eventually and soon almost all American cars were being manufactured with engines in the front. But then the picture started to reverse itself. In 1925, the Julian chugged into print with 'the first rear-engine car in 20 years.' Entirely unsatisfactory and 'old-fashioned,' it shortly thereafter became the first rear-engine model to go off the market in 20 years, too..."

Mechanix Illustrated, April 1949

Above L&R: caption: "Cut-away views of the Julian, built in Syracuse, New York, in 1925. It offered an aircraft adapted, rear-mounted six. Like Tucker, it delivered power to rear wheels through transaxle unit, and boasted fully independent suspension. Instruments were grouped, passenger seats set back as possible safety measure."

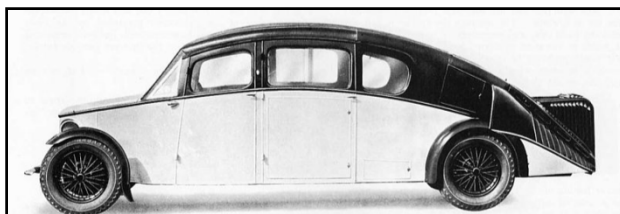
280



281

Streamline Moderne

282

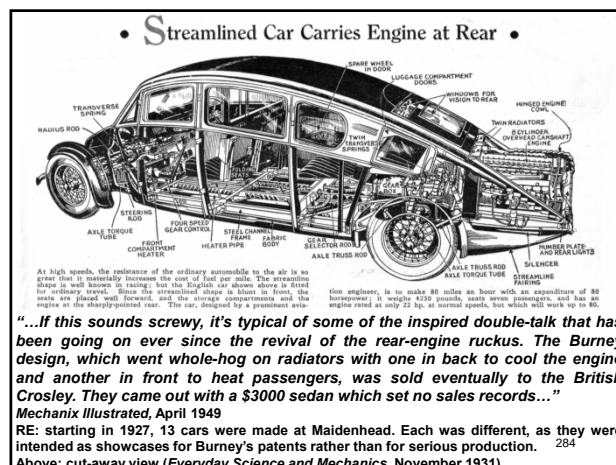


"...In 1931, Sir Dennistoun Burney, noted airship designer, had a go at a rear-engine car. He tried to peddle it to GM and Studebaker on the theory that its 66-33 weight distribution (66% of the weight on the back wheels and 33% on the front) would, when the breaks were applied, shift to a 50-50 balance. He also thought his machine took the bumps easier with front-wheel shocks rotating in an arc from the rear axle, and bumps under the back wheels being absorbed by a rotation around the front axle..."

Mechanix Illustrated, April 1949

Above: caption: "Streamline Cars Ltd. was the company responsible for making the Burney car designed by Dennis Burney. Two versions were made; this one had a vestigial bonnet." Sir Charles Dennistoun Burney rose to fame as an airship designer, best known for his work on the Vickers R100.

283



"...If this sounds screwy, it's typical of some of the inspired double-talk that has been going on ever since the revival of the rear-engine ruckus. The Burney design, which went whole-hog on radiators with one in back to cool the engine and another in front to heat passengers, was sold eventually to the British Crosley. They came out with a \$3000 sedan which set no sales records..."

Mechanix Illustrated, April 1949

RE: starting in 1927, 13 cars were made at Maidenhead. Each was different, as they were intended as showcases for Burney's patents rather than for serious production.

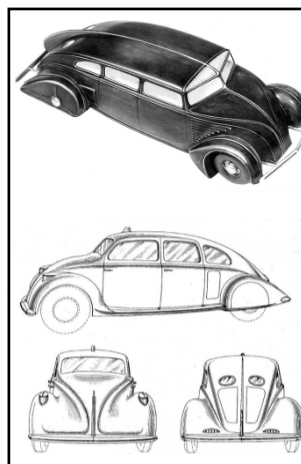
Above: cut-away view (*Everyday Science and Mechanics*, November 1931)

284

"Revolutionary features in motor car design, including such innovations as hydraulic steering and a streamlined body with the motor at the rear of the chassis, are embodied in an automobile designed by John Tjaarda, associated with General Motors Corporation. Tests of the novel car are now being carried out, and it is likely that the streamlined automobile will be put in production shortly. Prices of the car in various models, based on the cost of various experimental types, are expected to be remarkably low, ranging from \$700 to \$1,800..."

Modern Mechanics and Inventions, July 1931

285

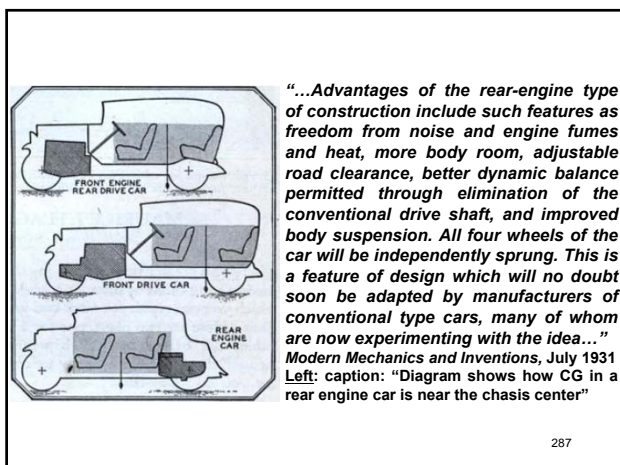


"...An experimental rear-engine design made its appearance in 1933. John Tjaarda, a Detroit who designed two experimental models for the Briggs Manufacturing Company, claimed it was ridiculously simple to drive. He explained in the magazine *Automobile Topics*: 'When starting, all one has to do is turn on the ignition, when a red light will show on the dash. Then step on the throttle which simultaneously starts the engine and the red light will go out and a green light shows. As the engine can not be heard in the front seat, the lights will tell what is happening in the rear'..."

Mechanix Illustrated, April 1949

Left: caption: "The John Tjaarda designed Briggs Manufacturing Company patent application drawings, 1933"

286



"...Advantages of the rear-engine type of construction include such features as freedom from noise and engine fumes and heat, more body room, adjustable road clearance, better dynamic balance permitted through elimination of the conventional drive shaft, and improved body suspension. All four wheels of the car will be independently sprung. This is a feature of design which will no doubt soon be adapted by manufacturers of conventional type cars, many of whom are now experimenting with the idea..."

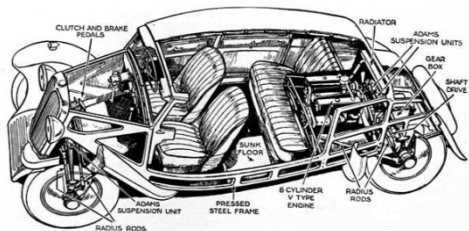
Modern Mechanics and Inventions, July 1931
Left: caption: "Diagram shows how CG in a rear engine car is near the chasis center"

287

"...Until the perfection of air-cleaning devices, the mounting of the motor at the rear of a car suffered from the inevitable disadvantage of being forced to breathe dust-choked air through its carburetor, causing the motor to wear out too quickly. Some of the first automobiles, twenty years ago, had their motors mounted at the rear, and many of us can remember the days of the 'side winder' which was cranked on the side, of the car. Although designer Tjaarda is associated with General Motors, the promotion of the streamlined car is being carried on by a small group of automotive engineers and manufacturers who will probably place the car on the market as an individual corporation..."

Modern Mechanics and Inventions, July 1931

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"...Tjaarda's cars caused a mild sensation in the industry for a year or two. Then Chrysler and Ford, potential customers for whom Briggs already made bodies, had to decide whether the sensation was good or bad. The freaks had V-8 engines mounted over the rear axles and buzzed through the streets of Detroit without mishap until winter arrived. The original notion was that the engine heat could not seep forward and cause discomfort during hot weather. As it turned out, passengers were cool enough in summer, but during the winter they froze. No heating system had been devised!..."

Mechanix Illustrated, April 1949

Above: caption: "Mechanical details of the car are strikingly shown in this drawing. Placing of the motor at the rear enables the space under the hood, usually reserved for the engine, to be devoted to leg-room for front seat passengers." 289

"...Commenting on the new car Mr. Tjaarda says: 'Interest prevails at present for rear-engine cars, and for good reasons. The present-day car has almost attained its height of perfection. If streamlining is going to take seriously in the near future as is predicted the arrangement of our cars today affords so many difficulties that it is not worth while to consider such a step. For many years to come there will remain an active market for the type of cars to which we are now accustomed with progress having its way. However, there is no doubt that the rear-engine car is the car of the near future.'"

Modern Mechanics and Inventions, July 1931

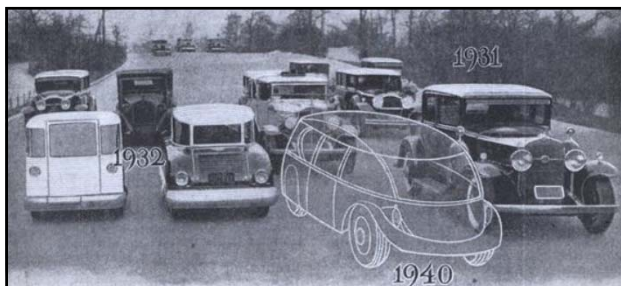
290



Above: the Briggs concept car in the Ford Exhibition Building at the 1933 Century of Progress Exposition, Chicago. Briggs was working on designs for the Chrysler Airflow when Edsel Ford approached the company in 1933 for help in designing a new smaller-sized Lincoln that FMC was considering putting into production. Briggs responded with the John Tjaarda-Howard Bonbright streamline design that was accepted and exhibited at the Century of Progress Expo. It was followed up with a complete running and driving rear-engined prototype that was successfully tested in 1934. 291

You'll Hardly Recognize It

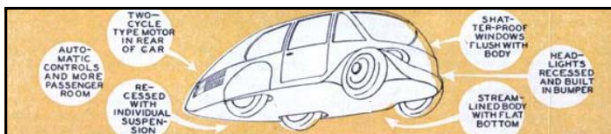
292



"The automobile industry, always one of the country's most progressive, is today on the verge of astonishing changes in engineering design which are likely to make your next automobile so radically different in appearance that you'll hardly recognize it..."

Modern Mechanics and Inventions, April 1932

Above: caption: "Phantom though it now is, 1940's automobile is already taking shape in engineering laboratories. Note the modified streamline cars shown in left foreground of this photograph, forerunners of design developments now taking place." 293



1940's AUTOMOBILE

will have, according to present trends:

Motor mounted in the rear of the car.

Streamlined "tear-drop" bodies.

Independently suspended wheels to absorb road shocks.

Super balloon (air-wheel) tires riding at 10 pounds air pressure.

Frameless chassis—that is, axles and heavy cross-members such as are now used will be eliminated.

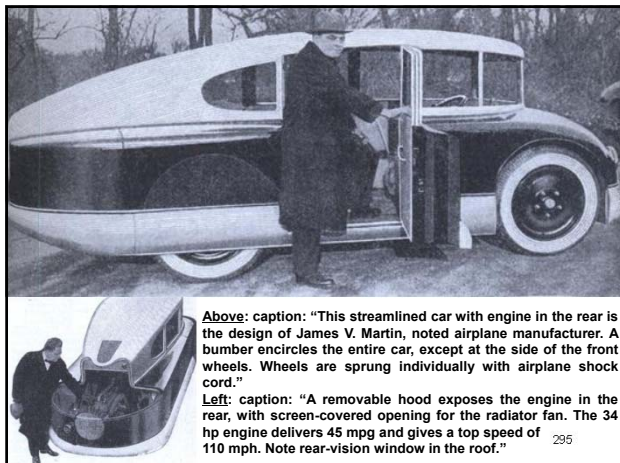
Smooth riding qualities unequalled by any type of present-day car.

Elimination of motor and body noises and vibration.

"...But, though its coming will be gradual, in deference to the hesitancy of the buying public to invest in anything freakish, the tear-drop car is on the way. The single factor of moving the motor to the rear makes possible a body design with such unique advantages that it must eventually become universal. Heat and noise of the engine are behind the passengers, so that they can ride in comfort. Forward vision becomes much less obstructed with the elimination of the long hood over which drivers must at present peer. That same engine can be better balanced at the rear. No long propeller shaft is necessary. This makes it possible to lower the frame of the car and smooth off its under parts..."

Modern Mechanics and Inventions, April 1932

Above: caption: "Main lines of development on which automotive engineers are working are presented 294 in the drawing shown above"



First Minivan (?)

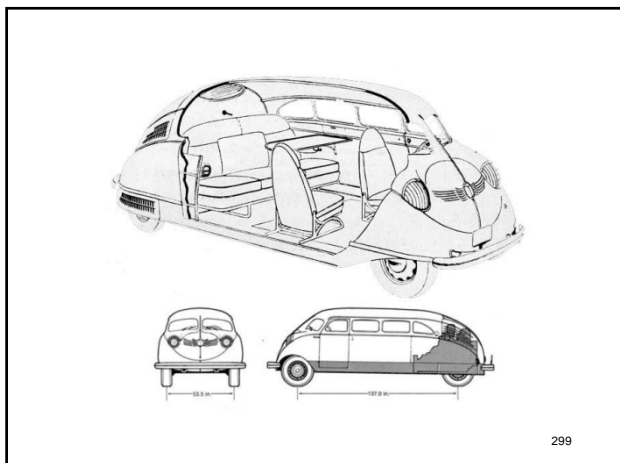
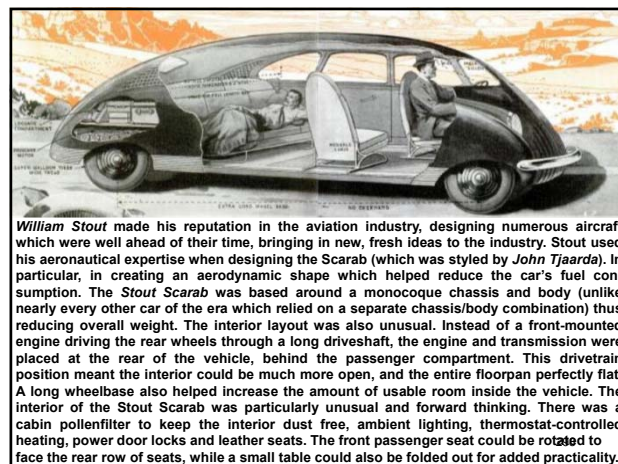
296

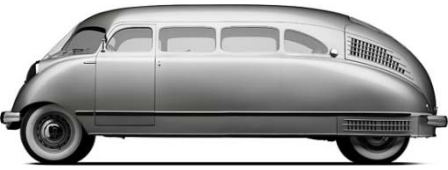
"...Most unconventional and probably most comfortable of all interiors in a rear-engine experiment was brought out several years before World War II by William B. (Bill) Stout. He first achieved engineering fame by building the first all-metal airplane. In 1934, Stout showed up with a living-room on wheels. There were broad back seats, three chairs which could be moved around and a comfortable chair for the driver. A drop-down bed and a table completed the ensemble. Stout planned to build 100 of these cars the following year. Instead of launching production, however, he refined the job into a newer model called the Scarab. It got a good press but never got any farther down a production line. One reason alone was enough to kill the idea - it would have had to sell for \$5,000..."

Mechanix Illustrated, April 1949

RE: the Stout Scarab was a peculiar, but clever automobile developed by the famous engineer William Stout. The car was designed from the outset to be more practical, safer, spacious, comfortable and versatile than any other car available at the time. Many people consider the car to be the very first minivan. In retrospect, that's a fairly good approximation of what the Stout Scarab was. But it was much more than that.

297





Powering the *Stout Scarab* was an 85 horsepower *Ford V-8* flathead engine, connected to a three-speed manual gearbox. Ford components were selected because Stout's aviation business, the *Stout Metal Airplane Company*, had been purchased by Ford and the two had collaborated on previous engineering projects. In total, nine *Stout Scarabs* were built from 1934 to 1939 (the company had hoped to build up to 100 cars per year). The cars were all unique, mainly because they were all more or less pre-production models. The high price tag and rarity of the car meant that most of the nine examples built ended up in the hands of the well-to-do. WWII put the car on hold as American industry turned its attentions towards producing weapons-of-war rather than quirky family cars. However, in 1946 *Bill Stout* built one final Scarab, naming it the "Stout Scarab Experimental." Despite being based on a now ten-year-old design, this car became the first vehicle to use a fiberglass body and the first to use air suspension. Of the nine Stout Scarabs built, five survive.

301

1935 STOUT SCARAB SPECS


Engine: V8, L-Head-watercooled, cast-iron block and heads, 3 main bearings

Transmission: 3-speed manual, floor shift

Brakes: Four wheel, hydraulically-operated cast-iron drums

Body construction: All steel

Body style: Two-door, 6-passenger, rear-engine, rear-wheel-drive sedan





Length: Overall: 195.5 inches, wheelbase: 137 inches

Weight: 3,300 pounds

Fuel consumption: City driving: 14-16 m.p.g.; highway: 18-20 m.p.g.

Top speed: 80 m.p.h.

Acceleration: 0-60 m.p.h. in 15 seconds




302

Tomorrow's Car

303

Out of the Air --- TOMORROW'S CAR



"It is possible today to build an automobile bigger than a Buick, more powerful than a Cadillac, better riding than any previous car yet 50 percent more economical, 50 percent lighter in weight and 50 percent more spacious inside than are present passenger vehicles. Since this automobile is not being built, even though it is possible, we must regard it as the car of the future. And I believe it will come at a time not very distant. But from whence will it come?..."

William Stout (1942)

RE: excerpt from the article he authored about the *Stout Scarab* and the future of automotive design which appeared in the January 1942 issue of *Popular Mechanics* magazine (left)

304

"...My answer, based upon actual experience in building both automobiles and airplanes, is that it must be the brain child of the aviation industry. The reason why it cannot come from the automotive industry is that too many tools have frozen that industry into one position. The idea of 1,000 cars per day has obsessed the manufacturers with a tradition of dies and production machinery they cannot overcome long enough to do a new car on any other basis..."

William Stout (1942)

305

"...A large percentage of the space in today's automobile is allotted to machinery, but in tomorrow's 'wingless plane-car' the machinery will be hidden so that you will have to look for it. The motor will be concealed under the rear seat, or just behind it, probably underneath a luggage compartment. Naturally this means that I expect the car to be powered with an engine at the rear, instead of the front. This engine will be air-cooled, most likely developed from the small airplane types now being built for flying use, and will gain 20 percent economy merely from the fact that it is air-cooled and runs at a higher temperature. Being the pancake type – horizontal construction with the cylinders arranged on their sides instead of standing on end – the engine will fit low down in the back of the vehicle and leave plenty of room for luggage. One feature I am confident will be incorporated into this car will be a rear seat at least six feet wide, perhaps three or four inches more, giving space for a full-length couch or bed to be used on long tours or by the drowsy passenger. This means that the overall width of the automobile will be about six-feet, six-inches – not a great deal more than the present car, but the difference is that tomorrow's car will be arranged so that the width will be employed for the comfort of the passenger rather than for a place on which to hang fenders. Today's auto – even the largest – has a front seat approximately five feet wide and a rear seat several inches smaller, while the outside road width at the fenders is six-feet, four inches..."

William Stout (1942)

306

"...Fenders on today's car will be omitted from our auto of tomorrow. Running boards are fast disappearing and when they finally vanish, fenders as such will disappear also, first on the rear wheels and then on the front. Eventually all wheels will be enclosed. Wheels will be placed at the ends of the future car, eliminating the overhang found in today's automobile. This will mean placing the engine directly over the rear wheels, gaining another advantage – hooking the engine directly to the transmission system thus reducing a loss in power that always results from use of a long drive shaft. With the weight in the back, the rear seat ride will be the best ride in the car. At the same time, the weight on the front end will be light enough so that if you run off the slab onto soft spots beside the highway, there will be no tendency for the front wheels to bury themselves in the mud and put the car out of control..."

William Stout (1942)

307

A Challenge and a Prophecy

308



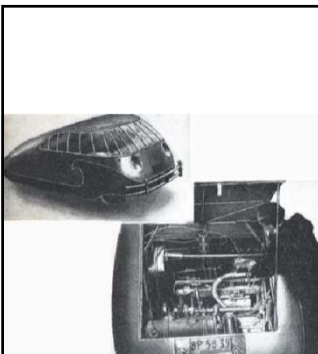
"...From actual operation of an automobile of this general construction, I know that the rear-engine car is safer, having less tendency to skid because the additional weight gives the rear tires a better grip on the road, than today's front-engine car. Even on ice, I find it easy to maintain traction in this car – the Stout Scarab, a vehicle I designed and produced and which I have driven 125,000 miles. This car is still able to take the road for a long, high-speed run. A few others that we manufactured for friends are giving similar service."

William Stout (1942)

309

Before the War

310



"...In Pasadena, California, an inventor has developed a car which should become quite popular. The design is such that the shock of collisions will be absorbed by the front springs. In this streamlined car, the engine is at the rear."

Mechanics and Handicraft, Sept. 1936

Left T&B: caption: "Because the engine is in the rear of this auto, the inventor hopes a greater protection will be offered against deadly carbon monoxide fumes. Springs at the front are to deaden the shock of collisions."

311

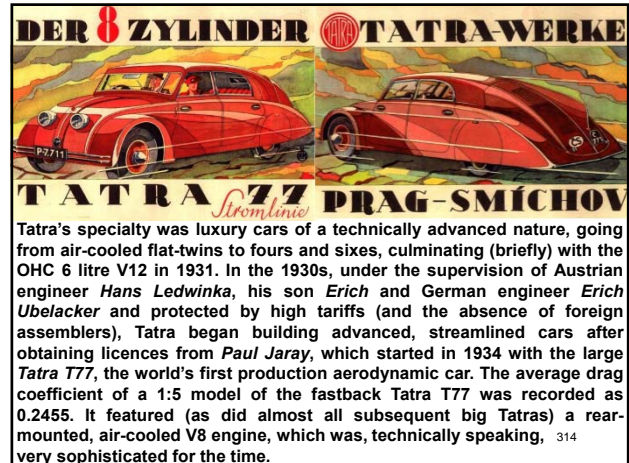
"...In 1938, Emile E.C. Mathis, French motor manufacturer, and Axel Wenner-Gren, Swedish industrialist, announced plans to build in France, Sweden, England and the U.S. a small car with a radial engine in the rear. It would be 'designed to give 50 to 60 miles on a gallon of gasoline.' In this country they hoped to sell the car for \$500 but the War interrupted their aspirations and the car never got into production..."

Mechanix Illustrated, April 1949

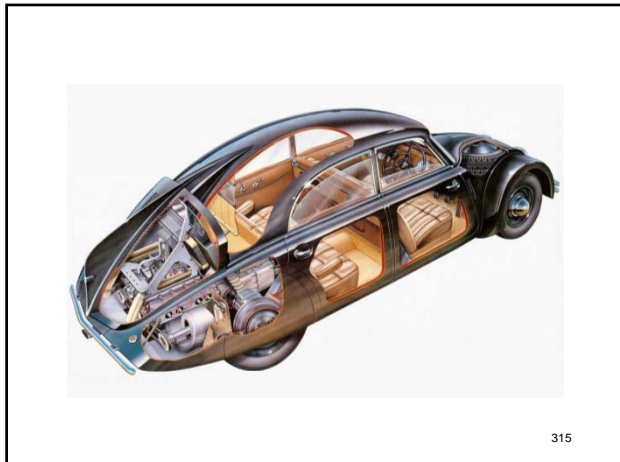
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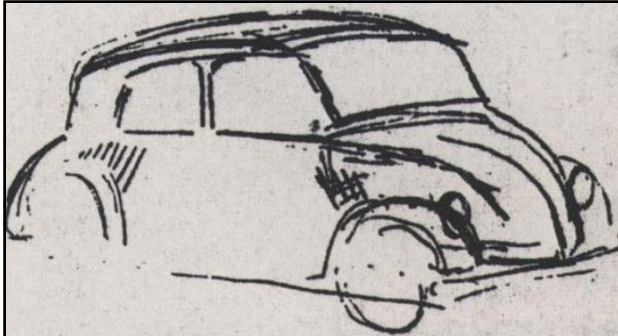
316

The People's Car

At first, the Nazi party scoffed at the idea of building a national highway network (a/k/a "Autobahnen"). They deemed it an "elitist fantasy" considering the fact that only the elite of German society owned automobiles in the aftermath of WWI and the dire economic conditions faced during both the *Weimar Republic* and well into the Nazi era. To hear Hitler tell it, the idea for an "Autobahn" was all his, conceived in the early 1920s while he was serving a prison sentence and writing his manifesto: *Mein Kampf*. In reality, Hitler and the Nazis opposed the building of the "Reichsautobahnen" right up to the time Hitler came to power in January 1933. Now, with millions unemployed, they realized the "make-work" potential of building the road network, as well as its strategic value in wartime. Their main argument had previously been: *who would use it?* Indeed, in the pre-WWII days, foreign visitors noted the lack of automobiles on the fine German roads. To fill the new motorways with cars affordable for the average German worker, Hitler turned to Ferdinand Porsche to design, for "The Roads of Adolf Hitler," a Volkswagen (a/k/a "People's Car"). In a Berlin Hotel in 1935, Hitler sketched-out an early concept for the car in a meeting with Dr. Porsche.

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Above: at a Berlin Hotel in 1935, Hitler sketched-out an early concept for the car in a meeting with Dr. Porsche. It's similarities to the Tatra design/s both he and Porsche admired are readily apparent. Hitler stipulated that the vehicle would have four seats, an air-cooled engine and cost no more than 1K Reichsmarks, putting it within reach of ordinary workers.

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Ferdinand Porsche - recognized today as one of the greatest car designers of all time (he also designed tanks and other military vehicles for the German military during WWII), produced a lightweight, low-riding rear-engined vehicle. A new factory was constructed and the car went into production in the late 1930s. However, by that time all industrial production was shifting to a wartime footing thus, few units were produced prior to WWII.

Left: the VW Beetle's official introduction in June 1938. Führer Adolf Hitler makes a speech during a cornerstone-laying ceremony to mark the start of construction of the Volkswagen factory at Fallersleben. In the foreground is the prototype Volkswagen car designed by Professor-Doctor Ferdinand Porsche and hand-made by the Mercedes-Benz car factory.

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Above: caption: "Adolf Hitler appears amused as he finishes a visit to the Volkswagen factory, 1938. Attending are Reich Labor Leader Dr. Ley (in uniform) and Professor Porsche."

Left T&B: caption: "Hitler inspects a Volkswagen convertible with Ferdinand Porsche (in suit, at Hitler's right)"

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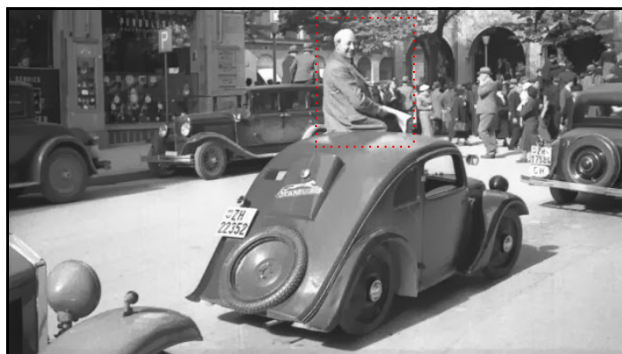
323



The concept car that Hitler envisioned and was made manifest as the *VW Beetle* by Dr. Porsche was - like the Autobahn, not completely original. The idea of a rear-engined, air-cooled low-cost car had been floating around in German automotive circles for years. One possible source for Hitler (and Porsche's) ideas (besides the Tatra designs), may have been a German-Jewish engineer named *Josef Ganz*. Author *Paul Schilperoord* claims in his book: *The Extraordinary Life of Josef Ganz - the Jewish engineer behind Hitler's Volkswagen*, that Hitler stole the idea from Ganz who fled Germany during the pre-war years (he died in 1967).

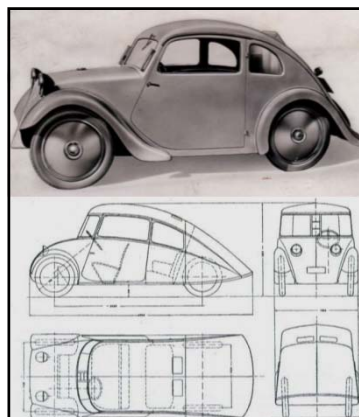
Left: a bullet-riddled Beetle on the streets of Berlin, 1945

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There are some surface and other similarities between Ganz's ideas and the VW Beetle. Volkswagen places the doubt over the car's origins down to the fact that many people, at the time, were talking about the concept of a small, low-priced car. VW claims that through Hitler, Dr. Porsche found the funding that Josef Ganz lacked and thus, was able to make manifest the popular idea. 325

Above: caption: "Josef Ganz with one of his designs"

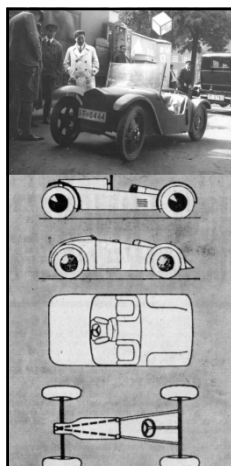


Schilperoord claims that Hitler saw one of Ganz's designs at a car show in 1932 and, not long after meeting with Dr. Porsche in 1935, Hitler shut down Ganz's operation. Also presented as circumstantial evidence is the fact that the Ganz car had the name "May Bug." However, there is no evidence that Hitler saw any of Ganz's sketches and/or design notes. The design/s of the two cars appear only superficially similar.

Top: caption: "A Ganz drawing of his proposed vehicle"

Bottom: caption: "A Ganz technical sketch"

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Being Jewish, Hitler's shutting down of the Ganz operation in 1935 was not unusual in Nazi Germany (discrimination/persecution along with the loss of businesses and personal property was happening to Jews all over Germany in the 1930s). Even the name *May Bug* for the Ganz car, although suspicious to modern ears, may be innocent. Though named "Beetle," it's unclear if the VW Beetle was ever called "The Bug" prior to the "Hippie" generation of the 1960s. In retrospect, Ganz seemed more interested in designing Roadsters, while Hitler had something more utilitarian in mind.

Top: Ganz with one of his Roadster designs

Bottom: Ganz drawing for a Roadster design

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Your 1942 Car

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"That car you'll be buying in 1942 - what will it look like? Will it have the engine in the front or in the back? Will it be heavier or lighter, longer or shorter, more or less expensive than the car you're driving now? Startling is the only word for the answers to these fascinating questions, as disclosed by an automotive survey just completed by Popular Science Monthly. Whispers of radical changes and innovations in motor-car design are in the wind, and the recent granting of a series of important automotive patents, every one of which covers a car having its power plant in the back instead of the front, heralds the dawn of a new era in automotive transportation..."

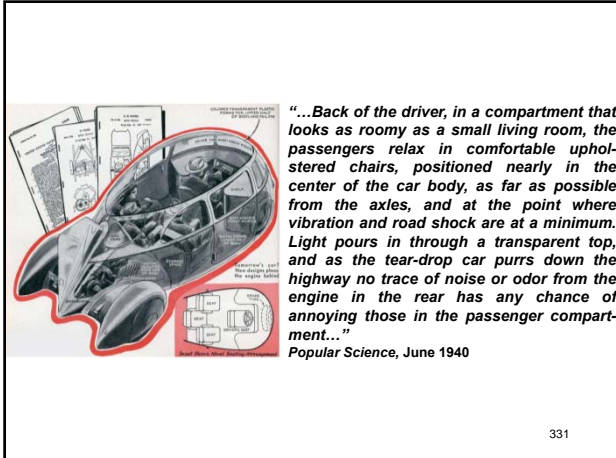
Popular Science, June 1940 329



"...Take the advanced car design patented only a few weeks ago and assigned to a leading independent car manufacturer. Streamline from nose to tail, looking like a giant aerial bomb on wheels, this model has its engine lifted bodily from the conventional forward spot and set down near the rear axle in what would be a 1940 car's trunk compartment. Although still in normal alignment, the engine and transmission are operated by remote control from the single driver's seat placed up in the very nose of the car, where the operator can take full advantage of his unlimited field of vision, unhampered by any trace of bulky fenders or engine hood..."

Popular Science, June 1940

330



“...The dean of all American motor makers, Henry Ford, is responsible for another recent patent that foreshadows the automobile of the near future. His patent calls for an eight-cylinder engine mounted at the rear of the car transversely, or crosswise, of the frame. As Ford points out in his patent: ‘It is almost essential that the drive to the axles be transmitted from the center of the frame and, consequently, the engine, when mounted transversely, must be located on one side only of the vehicle. In the past this has caused the car to sag toward the engine side. The applicant has provided a unit wherein the engine flywheel, clutch, and other relatively heavy parts are located on one side of the car with the crank shaft and cylinder block on the other side to thus obtain improved lateral balance for the unit’...”

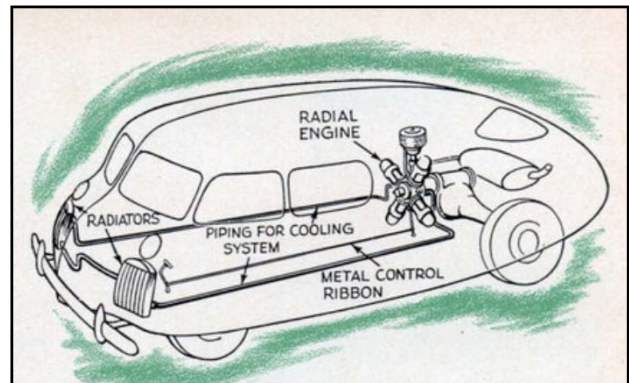
Popular Science, June 1940

332

“...Still a third group of patents, assigned to one of America’s largest automobile manufacturing corporations, brings to light a whole host of astounding new features. As in the cars mentioned above, this model also has its motor in the rear, but the power plant is of the radial type, with cylinders mounted in a circle around the central driveshaft like the engines that power the nation’s transport planes. Instead of one large radiator for the cooling system, this car has three small ones, two being placed beneath the front headlamps where water piped forward from the engine is cooled, and a third at the rear which cools the motor when the car is standing still. Ribbons of tough steel connect the driving pedals at the front with the power plant. And the car has no separate chassis or frame, the wheels being attached directly to the sturdy, specially designed steel body. The power plant in this model is a unit fastened to the body by bolts. When it needs overhauling or adjustment, you loosen a few bolts, support the rear of the body on a jack, and trundle the whole power plant away on the car’s rear wheels. According to reliable reports, this particular car has passed the drawing-board stage and is even now being put through tests on a midwestern automobile proving ground by engineers determined to iron out any kinks or flaws in its operation...”

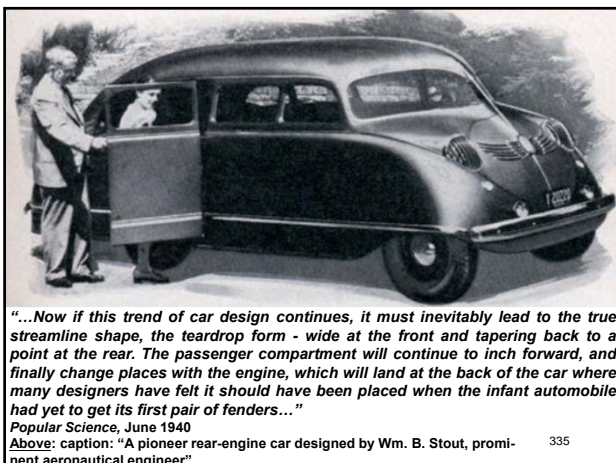
Popular Science, June 1940

333



Above: caption: “Radiators at front would cool a rear-end radial engine in this advance design recently patented by a leading automobile maker”

334



“...And what do the car owners themselves want in the car of the future? According to reports of automobile manufacturers, their customers concentrate on three demands: roominess, efficiency, and low price. And that is exactly what the rear-engine streamline car will provide when it rolls off the production line: A body having the spaciousness, comfort, and quiet of a well-lighted living room, a power plant with the new efficiency of lightweight, frameless rear-engine arrangement, and a lower price brought about by manufacturing savings made possible by a greatly simplified, scientifically engineered automobile.”

Popular Science, June 1940

336

War and Peace

337

"The American civilian is recovering gradually from the shock of his country's complete entry into the greatest war in history and its necessary sacrifices. Production of passenger cars ceased months ago, and the public is getting used to the idea that the family auto must last for the duration, possibly longer. It is not premature to talk of the postwar possibilities in this field of manufacture, for certainly it is one of the country's largest, and one upon which the people are definitely dependent..."

Popular Mechanics, December 1942

338

"...Although the general public may feel that the postwar car will be a radically styled, all plastic, rear-engine vehicle with a completely transparent top, it is only wise to discount this to a great extent. The length of the war will, of course, be a powerful governing factor. If the war should come to a quick end, the first postwar cars undoubtedly will be revisions of the 1942 models. This would be the only practical measure in consideration of the thousands and thousands of dealers who have been hit so badly by the cessation of automobile manufacture. Conversion from war production and a resumption of passenger car manufacture will be effected more quickly in this manner than to attempt complete retooling for radically designed models. In fact, revisions of 1942 models might be available six months after the war as against retooling completely for rear-engine or other radically styled models which might require 18 to 24 months before reaching the market..."

Popular Mechanics, December 1942

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Your Victory Car

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"...With the ever-rising cost of this war and the possible taxation measures brought on by it, we may find the average American forced to accept an undersized car in comparison to prewar models. It is entirely possible that a civilian version of the army jeep might be a most acceptable and desirable piece of transportation equipment. Conservatively styled versions of this jeep could be manufactured during the war to fill necessary civilian needs. This conservatively styled model, in both open and closed types, could be executed with simple tooling and a minimum of fabrication expense, yet it could have pleasing lines within these limitations. The civilian jeep could then be projected into a postwar 'Victory Car' in a more completely styled form. This model will take on graceful lines through the elimination of fenders and stressing of longer and more sweeping lines in an effort to make up in appearance for a short wheelbase. This car would have maneuverability, reasonable speed, greatly increased operating economy, and could be moderately priced. The trend toward simplicity will do much in connection with initial cost, yet predictions on cost are dangerous because of the unknown economic results of the war..."

Popular Mechanics, December 1942

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Left: caption: "Today's jeep could become tomorrow's popular car with a minimum of tooling and fabrication cost. Note outlines of army jeep on open car."

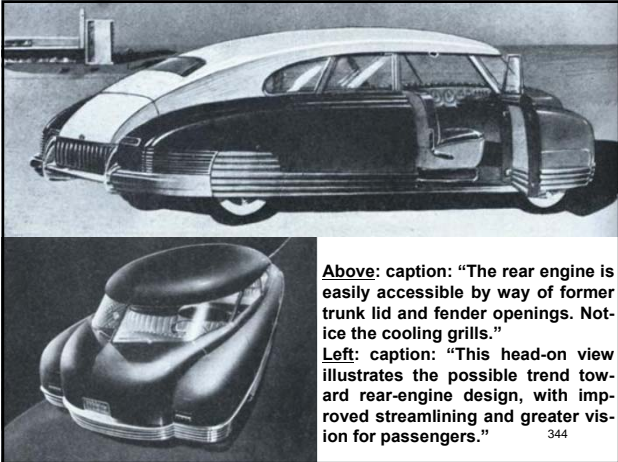
Right: caption: "The two drawings show how a civilian jeep can be given grace and style; short wheelbase is helped by single fender blending into body"

342

"...As the world gradually emerges from war conversion to peacetime manufacture, we may find the rear-engine type as an ultimate and desirable possibility. Passengers will be moved forward for further increased vision, more interior lounging space, more complete body streamlining. The placing of engine noise, heat, and fumes behind the passengers instead of in front of them is a long-desired change. The rear engine design offers traction over the rear driving wheels, yet there is speculation as to whether it might reduce the weight over the front wheels to a point where satisfactory steering characteristics might be reduced. Moving the passengers forward enables the rear-engine car to approach more nearly the teardrop shape; however, the degree to which passengers can be moved forward is limited by the space required to turn the front wheels when steering. The rear-engine car with its relocated power plant will eliminate the need for drive-shaft tunnels and the car can then be lowered to a somewhat greater extent than existing models, yet this, too, is governed by ease of entry and exit and by existing curb heights..."

Popular Mechanics, December 1942

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Above: caption: "The rear engine is easily accessible by way of former trunk lid and fender openings. Notice the cooling grills."

Left: caption: "This head-on view illustrates the possible trend toward rear-engine design, with improved streamlining and greater vision for passengers."

344

Observe and Prophecy

345

"...Each succeeding week of worldwide warfare will find new scientific and technical discoveries which will influence the transportation field. Because of his work in almost every field of manufacture, the industrial designer is qualified to observe and prophecy acceptable trends and consumer demands."

Popular Mechanics, December 1942

346

Along Came Tucker

347



"...Then, of course, came Tucker with his plans for a posterior-powered jalopy with more trunk space, more power, better vision, more safety, better brakes, better styling, etc., at the same cost as a conventional auto. But production-line Tuckers still haven't made their appearance for general distribution and it looks like Tucker's dream won't come true (at this writing, anyway)..."

Mechanix Illustrated, April 1949

Left T&B: caption: "Man with flying hair, top, is W.B. Stout, who is testing aft-engine car he built of glass. The fabulous Tucker, bottom, gets its push from the 150-hp motor in the rear. Note the six exhausts."

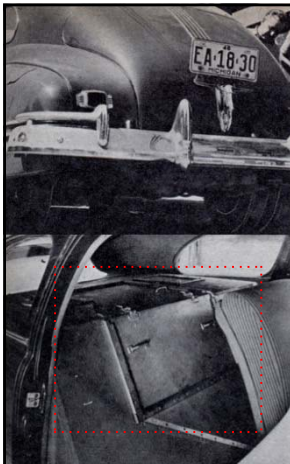
348

A Few Cents More

349

"...One day in 1946, an automobile that appeared to be an ordinary Pontiac sedan stopped at the New York mouth of the Holland Tunnel to pay the toll before proceeding to New Jersey. The attendant, casually preparing to charge the regular fare, let his gaze wander downward. He stopped short! The car had twice as many rear wheels as an ordinary private car. Like a bus, he thought. So he upped his fee to the bus category - a few cents more..."
Mechanix Illustrated, April 1949

350



"...This special six-wheel rear-engine job, put together in New York for General Motors, has since been driven, dissected, patted, pooh-poohed and praised by scores of engineers. Results? The tests kindled some enthusiasm. Its dual tires had unusually good traction on any kind of road surface. On snow, ice or gravel it performed better than others. It didn't 'fishtail' on slippery surfaces while gathering speed. The light front end made steering easy, without the tires side-slipping on a sharp turn. But that's about where its advantages stopped..."

Mechanix Illustrated, April 1949

Left T&B: caption: "See anything strange about that car at the top? It's a six-wheel Pontiac. Dual tires help carry the weight of the motor, set where the back seat used to be. That box, lower cut, hides the engine."

351

The Down Side

352

"...What are some of the arguments against the rear-engine design? One of the principal ones is weight distribution. With the heavy motor over the rear axle, the center of gravity of the car is shifted to the rear. This means that when not under complete control, the car will have a tendency to turn around and travel backwards, like an arrow shot tail-first. When skidding on ice, for example. Then, too, in case of an accident, the heavy rear moves forward, telescoping the car and its occupants. Even the rear-engine boys recognized this. In almost all models, the front hood has been retained. The driver, in his perch way up front, is minus the protection of the heavy engine and its frame, it is claimed. Steering will not be as positive since not enough weight will bear down on the front wheels. Engine cooling, too, is another problem..."

Mechanix Illustrated, April 1949

353

The Up Side

354

“...What can be said in favor of the rear-engine car? The driver can be moved forward for better visibility. Added weight in back gives better traction. Noise and engine heat are eliminated from the passenger compartment. Fewer engine parts are necessary; one of the first to go would be the long drive shaft and its bulge in the car floor...”
Mechanix Illustrated, April 1949

355


The Bustle Buggies Know Best

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MECHANIX ILLUSTRATED

15¢

APRIL



See page 46


Exclusive—
GENERAL MOTORS' REAR ENGINE CAR!

“...That Pontiac and a number of other GM ‘bustle buggies,’ told the engineers the pros and cons of the problem. But the styling section of GM still wasn’t convinced. What about those super-streamlined beauties the artists, have been playing up as the ‘cars of the future’? You’ve seen plenty of them. Three persons in front, looking through the swept-back windshield. There is no hood on this creation - remember, the engine’s way back out of the way. In the rear seat are three passengers with engaging grins on their faces, happily contemplating life. There wasn’t enough evidence against the rear-engine to warrant its complete dismissal. If the body could be styled to fit, and if enough advantages could be found in it to outweigh the objections to its engine location, GM would have itself a new car...”

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Mechanix Illustrated, April 1949

Do You Like It?

358



COVER STORY

General Motors' Rear-Engine Car

“...To answer these questions, they built a rear-engine car which they called the Corsair. It's a three-eighths life-size, natty little model, just like one of those futuristic dream-wagons the artists have conjured up. But here's what they had to do with it. Do you like it?...”

Mechanix Illustrated, April 1949

Left: caption: “Harley Earl, GM's style chief, poses with his rear-engine Corsair”

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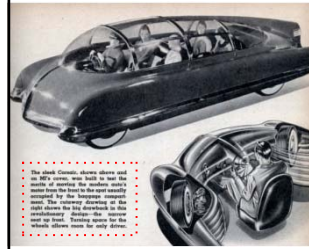
The Overall Effect

360

"...To make room for the front wheels to turn and to give the driver all the extra visibility the design is supposed to afford, they had to put him all by himself up front. With the wheels fully turned, only 34 inches remained between them for the driver's legs. To accommodate the passengers, two more seats were necessary. The overall effect was that of a bus. This, in the GM minds, was enough of a reason to pigeon-hole the idea. At least for the time being..."

Mechanix Illustrated, April 1949

361



Left: caption: "The sleek Corsair, shown at left and on MI's cover, was built to test the merits of moving the modern auto's motor from the front to the spot usually occupied by the baggage compartment. The cutaway drawing at the right shows the big drawback in this revolutionary design - the narrow seat up front. Turning space for the wheels allows room for only driver."

362

Car of the Future (?)

363

"...The Corsair is undoubtedly GM's 'car of the future.' Will it ever be produced? It has been tested. Its advantages and disadvantages are known. If you, the motoring public, demand this style car, GM won't have any alternative but to take it from its moth balls, wipe it off, and hand it over."

Mechanix Illustrated, April 1949

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Buslike

365



"Assembled entirely from standard parts and sub-assemblies, a rear-engine automobile called the Mustang has been introduced in Seattle as the newest entry in the low-price field. The car, which seats six, two in front and four in back, is designed to sell for \$1,235. It has a four-cylinder, 59-horsepower Hercules engine. The power unit, consisting of engine, transmission and rear axle, slides out for repair when the body is raised. A door in the body just ahead of the rear wheel provides access to the engine for servicing. There is a large luggage compartment in the rear. The buslike front end provides excellent visibility for front-seat occupants."

Popular Mechanics, February 1949

366

What Happened?

367



"Sleek, beetle-high cars with retractable wings and power plants capable of jetlike acceleration, even when climbing Pike's Peak, are some of the things many Americans have been led to believe were a matter of months away. We have dreamed or thought of the day when our American cars would resemble Buck Rogers creations and perform accordingly. As the war drew to a close, we heard rumors of super streamlined beauties in the works which would make anything we knew of automobiles in the past seem antiquated. So what happened?..."

368

Mechanix Illustrated, September 1947

Yesterday's Stew

369

"...Instead of super designs with super power plants, the postwar 1946 offerings were, for the most part, poorly disguised pre-war models. Many manufacturers had gone chrome happy in dressing up the front ends of their new cars so that they looked like the familiar juke box in the corner drugstore. A few added a bit of horsepower but, essentially, all were just yesterday's stew with a bright dash of tabasco to keep things from getting monotonous..."

Mechanix Illustrated, September 1947

370

Surrealist Pipe Dreams

371

"...We have seen pictures of automobile interiors that made Cleopatra's quarters on the royal barge look like the left wing of a flophouse, power plants so sleek and streamlined you couldn't even get fuel into them, and other surrealist pipe dreams..."

Mechanix Illustrated, September 1947

372

Q & A

373

"...I contacted executives and chief engineers of every major automobile company in America. Besides these I questioned independent designers and automotive authorities from coast to coast. I asked them all the same questions and though I got a variety of answers many of them ran in such similar pattern that a number of definite conclusions come out about our automobiles not only a year or so from today, but ten years from now. Of course, in ten years many things can happen that can alter some of these ideas but a lot of them will stand. However, what's most revealing is how the important brains of the automotive industry are thinking to-day..."

Mechanix Illustrated, September 1947

374

Possible But Not Probable

375

"...Question number four was 'Do you expect that in five years or more rear engines will become popular?'"

It wasn't surprising that Stout should come out with a definite yes. It must be remembered that Stout's present sensational car is rear-engine drive; also, that a number of years ago he manufactured a car called the Scarab, which was a rear-engine drive affair. He has been a rear-engine advocate for a number of years. Shaw also feels there is a good chance for rear-engine cars and goes on to say that they will undoubtedly become popular as soon as the leading manufacturers are assured the public will accept them. All others say possible but not probable. However, one interesting comment was made by Youngren, who said there is very little chance as the advantage is questionable and the cost excessive..."

Mechanix Illustrated, September 1947

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Above: caption: "Will rear drives be popular in five years? Most car makers say 'possible but not probable.' One favors Flajole's design, above."

377

"...Questions eleven and twelve 'Do you expect the cars will be much lower in over-all height' and 'Will the cars have more interior room?'"

It is interesting how the answers to this question ran. Roy Cole of Studebaker answered that the cars won't be any lower and won't have any more interior room. He is undoubtedly using his car as a criterion which is worm high as you know and has the most interior room from the standpoint of seat width of any car on the market, except the Kaiser and Frazer, both of which have even more room than the Studebaker. Frazer replied that the cars will be lower but not much, and he also said the cars will have more interior room. All others said more interior space and lower silhouette..."

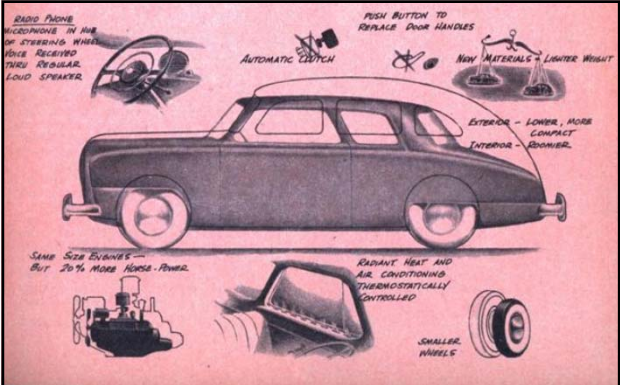
Mechanix Illustrated, September 1947

378

"...In question number thirteen I asked 'What features do you expect to make the greatest strides - body-design, engine design, safety-factors or general performance?'

This brought an astounding similarity, all answering body-design with the exception of Shaw, who rated body-design second to engine development. You can see from this that the manufacturers are interested in eye-appeal, which they have recognized for years as the strongest selling point..."
Mechanix Illustrated, September 1947

379



Above: caption: "Composite drawing of changes already in the works. Car outline contrasts most present body designs with what you can expect in all cars in the near future."

380

Conclusions


381

"...What conclusions can we draw from these answers? They may be a great disappointment to a lot of readers who have been waiting for that bang-up highly modernized vision. There will be changes leading off with body-design but they will come slowly, in pre-war evolution, a few improvements each year. As I see it, the war cost us five years of advancement and next year's cars will in reality be 1943 or 1944 models instead of 1948. The manufacturers, like insurance companies, must move slowly for two very good reasons. First, they can't afford to get so far ahead of their competitors that they have an apparent freak on their hands which the public must be educated to, thus costing millions through sales resistance to the stockholders. Second, because the fewer changes they have to make the easier it is not only from a standpoint of economy but from a standpoint of production to get their product on the market..."
Mechanix Illustrated, September 1947

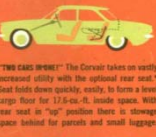
382

Car of the Year


383



TWO COMPACT CARS IN ONE. The Corvair takes on vastly increased utility with the optional rear seat. Seat folds down quickly, easily, to form a level cargo floor for 17.6-cu.-ft. inside space. With rear seat in "up" position there is storage space behind for parcels and small luggage.



"TWO CARS IN ONE": The Corvair takes on vastly increased utility with the optional rear seat. Seat folds down quickly, easily, to form a level cargo floor for 17.6-cu.-ft. inside space. With rear seat in "up" position there is storage space behind for parcels and small luggage.



LUGGAGE COMPARTMENT OF FRONT: Counter-balanced compartment 60 inches long makes it easy to load or unload from outside—luggage is segregated by lock. Combined space for luggage in forward compartment and storage area behind rear seat adds 15.6 cu. ft. *Available at extra cost.

Until the late 1950s, the major American auto manufacturers had made large cars their priority. Imports from Europe (i.e. Volkswagen, Fiat, Renault) demonstrated that there was a market in the U.S. for smaller cars, mostly as a second family car and/or for the budget-minded. By 1959, the "Big Three" auto manufacturers (General Motors, Ford and Chrysler) planned to introduce a "compact" model (akin to the Studebaker Lark - a successful compact car which had breathed new life into the venerable, but struggling, independent auto manufacturer located in South Bend, IN). Most of these designs were scaled-down versions of the conventional American car, using four or six-cylinder engines (rather than massive V-8s) with bodies approximately 20% smaller than standard-size autos. An exception was the Chevrolet Corvair. Led by Edward N. Cole, the Chevrolet Division of GM designed a revolutionary new car. To hedge their bets, GM also began work on a more conventional compact car, which would launch in 1962 as the Chevy II.

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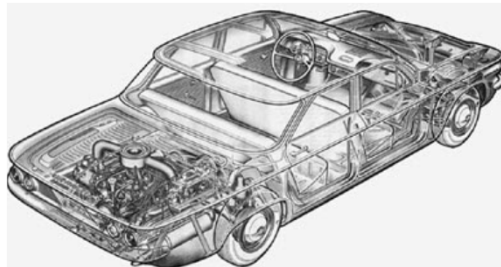


385



The *Chevrolet Corvair* represented a fresh design and broke ground in several significant ways. It was the first "Unibody" built by GM's *Fisher Body Division*. Its rear-mounted, mostly aluminum engine used an air-cooled, flat (horizontally-opposed) American-made six-cylinder engine and it boasted four-wheel independent suspension. Initial ads for the Corvair promised a future free of coolant changes and a compact car with a nearly flat floor for plenty of passenger legroom. The lack of a center tunnel was an additional benefit of the Corvair's rear-engine design, which delivered "Ground Gripping Traction" along with improved handling and braking. Meant to be a fuel-saving compact (boasting up to 30% better fuel economy than full-size sedans of the day), it was not meant to be a sports car (although its 140 cubic-inch flat-six engine was marketed as an "Airplane-Type Engine"), it produced just 80hp (in the 500 and 700 series models). Even so, given the Corvair's light weight, it was enough to produce acceptable acceleration which was on par with Chevy's larger models.

386

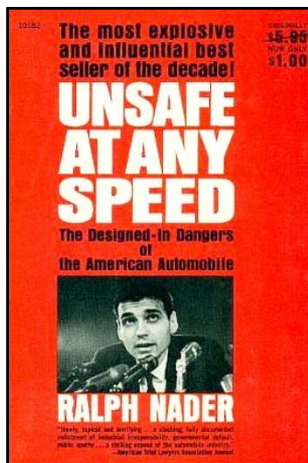


387



Initial sales results showed that buyers considered the *Corvair* to be something of a niche product, prompting GM to make several revisions to the car. A 900 series *Corvair Monza* was introduced late in the 1960 model year, featuring 95hp (via a high-performance camshaft and a lower-restriction exhaust) and front bucket seats. The 1960 *Chevrolet Corvair* won Motor Trend's "Car of the Year" honors in its debut year. Enthusiasts soon began to see the Corvair's sporting potential. Corvair models continued to sell relatively well and GM soon expanded the product line to include coupes, convertibles, station wagons, vans and light-duty pickups, all boasting an air-cooled, flat-six engine behind the rear wheels.

388



In November 1965, *Ralph Nader* published an explosive book on what he termed "the designed-in dangers" of American automobiles, entitled: *Unsafe at Any Speed*. Nader's book (left) - a broad investigation of auto safety failings in general, was critical of both the auto industry and the federal government. One chapter in particular (the first) focused on GM's *Corvair* compact car. Nader gave the chapter the title: "The Sporty Corvair: The One-Car Accident" (people were being killed and maimed in Corvair accidents that didn't involve any other cars). The chapter criticized its original suspension design and highlighted crash reports from Corvair-related lawsuits pending against GM. Although the alleged defects highlighted in Nader's research (i.e. the absence of a front anti-roll bar and the use of a swing axle rear suspension) were corrected by the time the book was published, the unconventional Corvair had been painted in a negative light. In reality, the debut of the compact, sporty *Ford Mustang* (in April 1964) sealed the fate of the Corvair. It proved to GM executives that rear-engined cars were not what the public wanted, after all.

389

Despite the fact that GM was still actively marketing the *Corvair* model line/s as late as 1967, "significant development" of further Corvair models was ceased (via an April 1965 internal GM memo). When Chevrolet launched its Mustang-challenging *Camaro* in 1967, it was clear that the Corvair's days were numbered. Ironically, *Ralph Nader* may have prolonged the Corvair's life with his criticism of the car since GM originally planned to end production as early as 1967. However, doing so would have portrayed GM as weak by folding under the pressure from Nader's biting criticisms. Despite the hype surrounding the Corvair's perceived dangers, the safety of other rear-engined cars using a swing axle design (such as the *VW Beetle* and the early *Porsche 911*) was never questioned publicly. Although any rear-engine is prone to oversteer (under certain conditions), later studies (prompted by a Congressional inquiry) demonstrated that even early, first-generation Corvair models were no more likely to suffer a loss of control in evasive maneuvers than more conventional (front-engine/rear-drive) models. Maintaining proper rear tire pressure in the early Corvairs was critical to ensure safe handling. Unfortunately, it was often neglected by both owners and service technicians.

390



391

Part 4

Safety With Style

392

Car of the Future

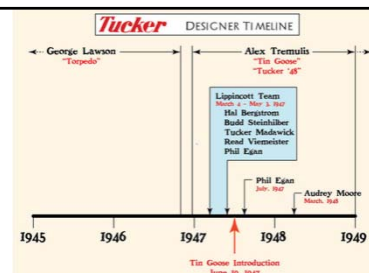
393

Preston Tucker's "First Completely New Car in 50 Years" evolved from several earlier concepts. The design was revolutionary for its streamlined styling and many technical firsts, but the initial concept for the car was far more exotic than the car the public was introduced to on June 19, 1947. That initial Tucker concept only made it to the drawing board and one known plaster model. How *Preston Tucker* initially envisioned his "Car of the Future" (and how it eventually became the *Tucker 48*) sheds much light on how manufacturer's evolve concept cars into mass-produced automobiles for public consumption.

394

Before and After

395

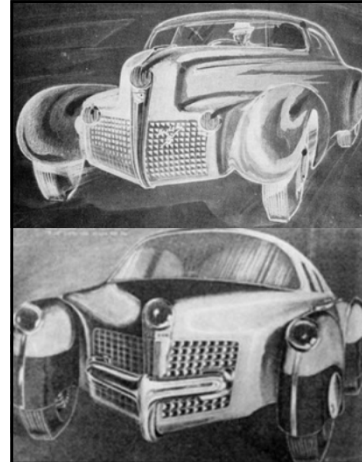


The timeline above breaks down the development of the Tucker automobile into two distinct periods. George Lawson's initial design was called the "Torpedo" (until his departure from the company in December 1946). At that time, *Alex Tremulis* was brought in and oversaw the development of the *Tin Goose* prototype and the 50 pre-production Tucker 48s. Tremulis officially resigned on December 31, 1948, but stayed on with Tucker to help out until the very end and remained loyal to the vision throughout the remainder of his career and into his retirement (he served as consultant for the 1988 Tucker film).

396

In 1944, George Lawson illustrated what Preston Tucker's "Car of the Future" would look like. Just as all designers are influenced by their prior work, so too was Lawson. He relied upon his earlier work as a GM designer (in the *Buick Division*) to form his initial drawings for the *Tucker Torpedo*. He started with his 1942 Buick concept, but was also able to blend in Preston Tucker's revolutionary concepts into an exciting new automobile. The rear engine layout, aircraft-inspired streamlining and headlights mounted on the moveable front fenders all contributed to the public's excitement over this all-new car. Preston Tucker was mounting a public relations campaign in order to acquire a manufacturing plant in which to build his new car, so these images were invaluable in providing his vision of what would be produced in the facility. This was big news in the automotive world, especially as the "Big Three" had to rely on dated pre-war tooling for their post-war cars. On the other hand, Tucker started with a clean slate. Unlike the *Big Three*, he had no pre-war body stampings to limit his creativity for an all-new car design.

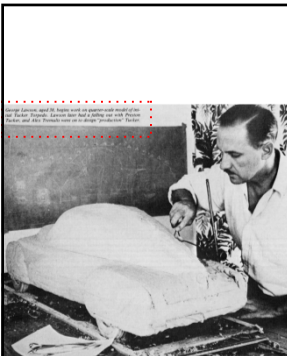
397



The public was enchanted with Tucker's promises for their post-war automobiles. There was nothing like Lawson's *Torpedo*. Interest and support for Preston Tucker was growing, while "Safety With Style" became the Tucker mantra. Top: caption: "George Lawson's 1942 Buick concept that would form the basis for the initial Tucker Torpedo concept"

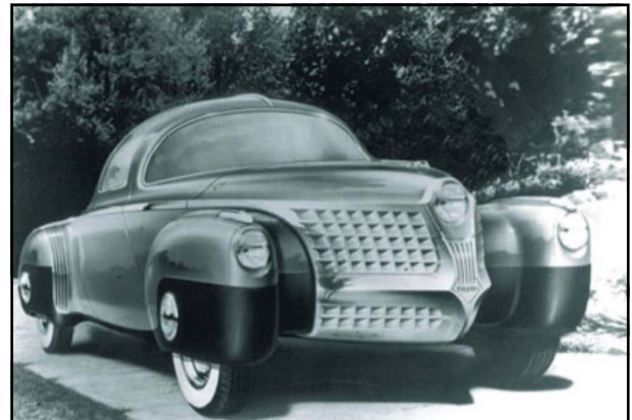
Bottom: caption: "Lawson's Tucker Torpedo illustration incorporating his 1942 Buick theme into the Tucker concept car"

398



Left: caption: "George Lawson, aged 38, begins work on quarter-scale model of initial Tucker Torpedo. Lawson later had a falling out with Preston Tucker, and Alex Tremulis went on to design 'production' Tucker." By the end of 1946, Preston Tucker had been making statements that his new car would soon be seen, yet he still only had drawings and a single 1:4 scale plaster model of the car. In order to provide photos of the new car, the plaster model was placed in realistic settings and the photos retouched to look like a full-sized automobile.

399



Above: caption: "Front 3/4 view of the plaster model retouched to appear as a full-sized car"

400

December of '46

401

By December 1946, George Lawson and Preston Tucker had a falling out. Lawson sued Tucker for \$50K. Tucker countered that he still had no car to show after almost two years' effort. The matter was eventually settled out of court with Tucker reportedly paying Lawson a \$10K settlement. December 1946 would also be noteworthy with the publication in *Science Illustrated* magazine in which the new *Tucker Torpedo* would be described as having a "series of spectacular engineering innovations." This would be the same image and description that would capture the public's imagination as well as that of Alexander Sarantos Tremulis. The SI article had made such an impression on Tremulis that he kept it in his archives. After all, it was this article that inspired him to pay P.T. Tucker a visit. The rest - as they say, is *automotive history*.

402

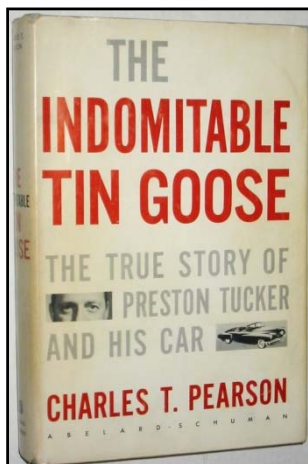
At the same time Tremulis was trying to get an interview with *Preston Tucker*, Tucker's planners and metalworkers were desperate to start building their first car. In September 1946, Tucker had promised a prototype car by Christmas. In October 1946, he again promised a prototype demonstrator would be ready by the first of the new year. Thus, by December, without Lawson to provide any guidance, the basics for what would become the *Tin Goose* were planned out in full scale by Tucker's production planners and mechanics.

403

"...Early in December 1946, during the lull in the housing fight, I was complaining to one of the top men planning production that I wished to hell we had something better than the lousy art work we were using, because it was getting tougher to sell every day. It was too arty and stylized to start with and, worse, still, even a layman could see that it was a long way from the six-passenger sedan Tucker said he was going to build. The production man said he was just as disgusted as I was, and if he had even an idea as to what the body and chassis were going to look like he could at least start figuring out how to build it. That was what started the first actual work on the final body design, and the entire job was completed in less than a month. The dimensions set up at this time were, with few exceptions, the ones that were used in the final body design. There was no great attempt at styling, though the side silhouette was nearly identical with the finished design. An extra four inches were allowed on wheelbase, because Tucker was still insisting on fenders that turned with the wheels, and the production man said there would be plenty of time to talk him out of that later..."

RE: excerpt from *The Indomitable Tin Goose* by Charles Pearson (1960). In his tell-all book, Pearson described his frustrations while working inside Tucker's design studio. He directed his anger squarely at George Lawson.

404



First published in 1960, *The Indomitable Tin Goose* provides an insider's account of the events that unfolded while designing the *Tucker 48*. Author *Charles Pearson* was Tucker's Public Relations manager from mid-1946 until the end of 1947. This was the most active and productive time period in the evolution of the design for the car. Full of historical information, the details of Tucker's trials and tribulations in obtaining the Chicago plant and financing are particularly insightful.

405

The date of the first meeting *Alex Tremulis* had with *Preston Tucker* was described by *Charles Pearson* in his book as having occurred on Christmas Eve, 1946. However, records show it may have actually taken place a few days later, with a call for an appointment on the 27th and a meeting on the 28th with Tucker, *Lee Treese* (VP of Manufacturing) and *Kenneth Lyman* (VP of Engineering). At that meeting, Lawson's drawings were reportedly discussed (Tremulis has also described meeting *Preston Tucker* for the first time at the *Drake Hotel* on Christmas Eve and again at the offices at *Tammen and Denison* on New Year's Eve). In any event, it was late December 1946 when Tremulis finally got an appointment with *Preston Tucker*.

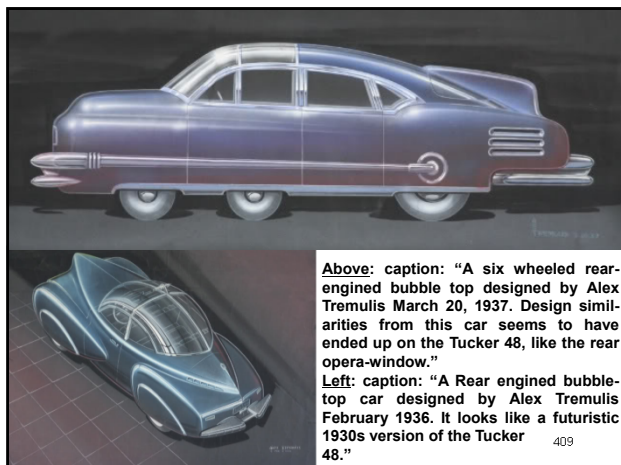
406

A Meeting of Minds

407

Tremulis had brought along his portfolio of futuristic concept cars. He had a wealth of prior experience as chief stylist at *Auburn-Cord-Duesenberg* as well as his design and custom builds while at *Briggs Manufacturing*, *American Bantam* and *Custom Motors of Beverly Hills*. By then, Tremulis was also an authority on streamlining, having designed many advanced jet aircraft and guided missiles for the USAAF during WWII, often using wind tunnels as a design aid. Tremulis' design philosophy of marrying aircraft technology with automobile design was identical to *Preston Tucker's* vision for his car - and his timing was perfect. Tucker, now without a stylist for his car with the unexpected departure of *George Lawson*, found his car's future designer in *Alex Tremulis*. At the time, Tremulis was working at the industrial design firm of *Tammen and Denison* and the Tucker account would give him full authority to pursue his automotive design philosophy.

408



INDUSTRIAL DESIGNING
 PRODUCT DEVELOPMENT
 TOOL ENGINEERING

Tammen and Denison, Incorporated
Consulting Engineers and Designers
 FIELD BUILDING • CHICAGO 3 ILLINOIS U. S. A.

"...We propose to coordinate our styling with a very sound engineering department on the theory that too many designs of the so called car of the future reflect little or no thought as to the engineering and manufacturing possibilities..."

Re: excerpt from an April 1946 letter to Henry Ford II offering the design services of Tammen and Denison's Transportation Division to FMC. Tremulis could immediately see numerous potential issues with the Lawson design and in his initial discussions with Preston Tucker, he sought to redesign the car for mass market appeal and manufacturability. On January 5, 1946, he met again with Tucker, but this time he was joined by Harold Karsten (a/k/a Abe Karatz), Fred Rockelman and Preston Tucker Jr. This meeting would prove to be of historic importance.

A Transitional Design

Alex Tremulis created a series of impressive renderings that fed-off of Lawson's design, yet provided more practical design changes. Specifically, he designed a four-door sedan where the doors opened into the roofline to allow ingress without bumping your head. On the bottom of the doors was a raised rocker panel so that the doors wouldn't hit the curb upon opening. The desire to seat three *Chicago Bears* linemen in the front and rear mandated a more conventional roofline (lower in the middle and higher on the sides) so that three could sit abreast (in the front and/or back seat) without the end passenger/s bumping their heads on the door windows. Each of the fenders sported streamlined sheet metal flowing back from the wheelwell which conveyed a unique blend of the pre-war pontoon fenders with the latest in flat-fendered side treatments.

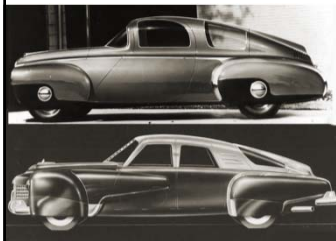


Chief Stylist

415

Preston Tucker was impressed. From that point on, *Alex Tremulis* would be the Tucker's new chief stylist, regardless whether or not he was still with *Tammen and Denison* or working directly for the *Tucker Corp.* In effect, he was functionally the Chief Stylist for Preston Tucker, regardless of who signed his pay stubs. In any event, Tremulis had managed to retain the styling cues and relative dimensions of the Lawson design while providing a clear and realistic direction in which to proceed. The moveable front fenders of the Lawson design were retained for the time being, but they would be entirely eliminated within the next few days. *Charles Pearson* described the side silhouette of Tremulis' design being very close to the dimensions Tucker's men had laid out (it appears very close to the Torpedo's silhouette as well).

416

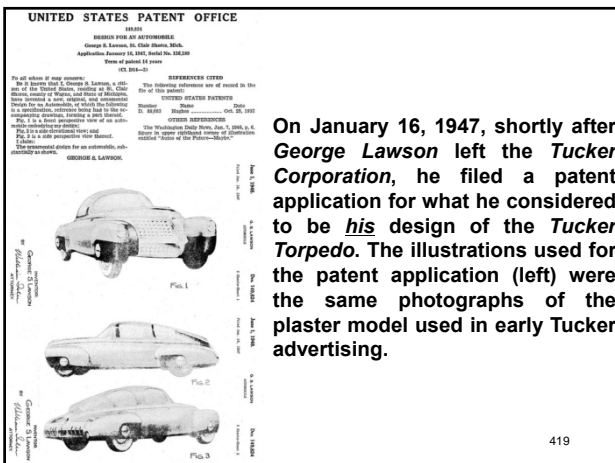


Left T&B: in profile, both the *Torpedo* (top) and *Tremulis'* initial design (bottom) were dimensionally similar. In fact, the same basic profile carried all the way through to Tremulis' final plan view for the *Tucker 48* (as of September 1947).

417

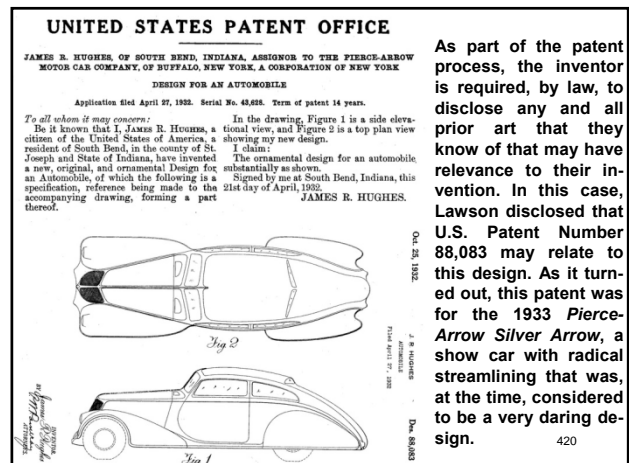
Intellectual Property

418



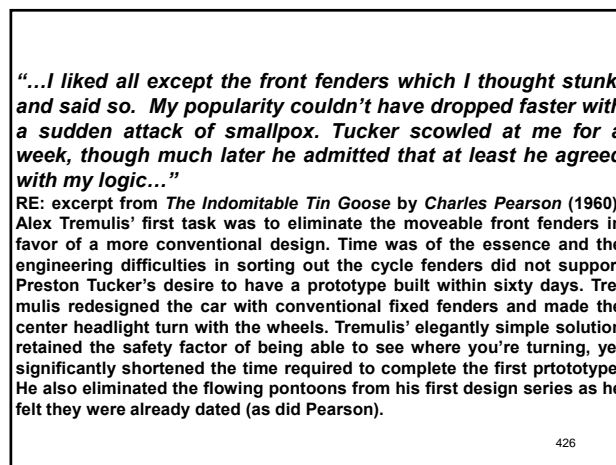
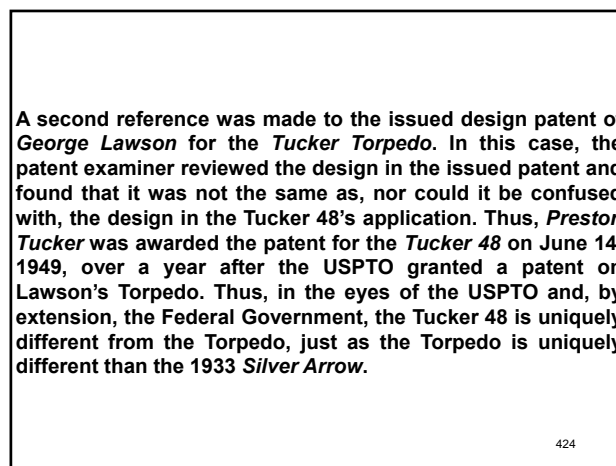
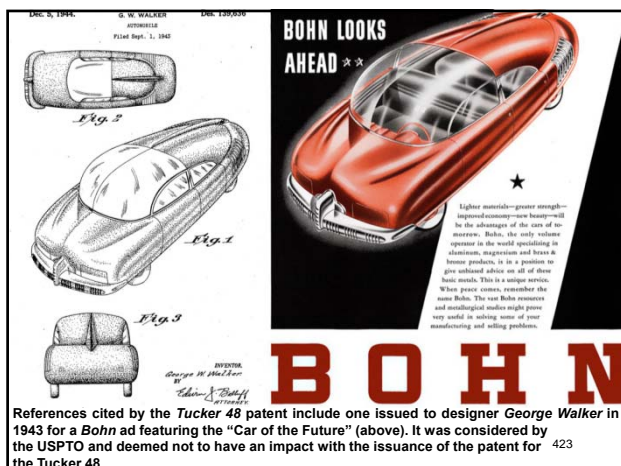
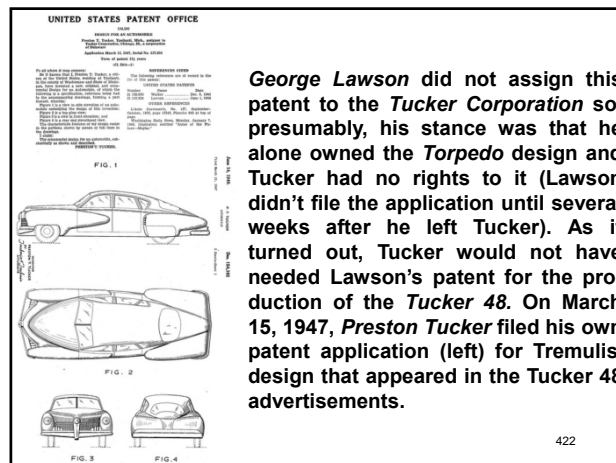
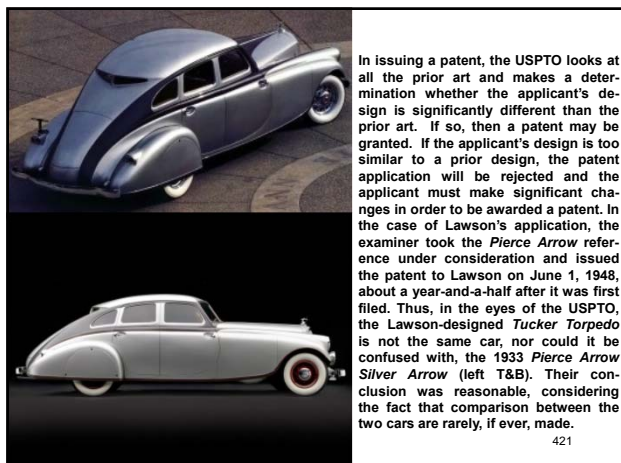
On January 16, 1947, shortly after *George Lawson* left the *Tucker Corporation*, he filed a patent application for what he considered to be *his* design of the *Tucker Torpedo*. The illustrations used for the patent application (left) were the same photographs of the plaster model used in early Tucker advertising.

419



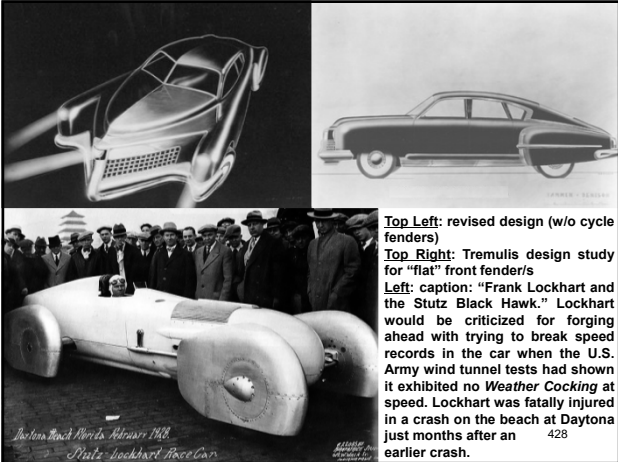
As part of the patent process, the inventor is required, by law, to disclose any and all prior art that they know of that may have relevance to their invention. In this case, Lawson disclosed that U.S. Patent Number 88,083 may relate to this design. As it turned out, this patent was for the 1933 *Pierce-Arrow Silver Arrow*, a show car with radical streamlining that was, at the time, considered to be a very daring design.

420



However, *Preston Tucker* liked the first fender arrangement and felt his first impressions were usually correct, so the unique pontoons stayed. In retrospect, a wise decision since these characteristic fenders would be forever identified with the *Tucker 48*. However, to support his argument for the design change which would eliminate the cycle fenders, Tremulis used the safety aspect which resonated with Tucker. He brought up the potential instability problems of the land speed record car of Frank Lockhart's 1928 *Stutz Black Hawk*. Like the *Torpedo* design, Lockhart's car incorporated front cycle fenders but Tremulis felt it was shown in wind tunnel tests that the car would not produce "Weather Cocking" at speed (in this case at around 200 mph). *Weather Cocking* is a term used to describe a vehicle's tendency to turn into a strong wind and helps to straighten out a vehicle if it starts to go sideways. Without it, the stability of a car may be dangerously compromised. It's highly doubtful that the *Tucker Torpedo* would have exhibited similar handling characteristics to Lockhart's Stutz, especially at highway speeds, but Tremulis' safety angle was convincing.

427



429

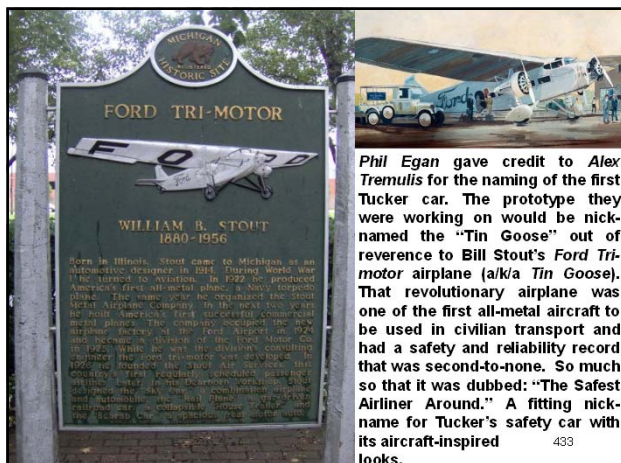
Design on the Fly

"Between the first of January the spring of 1947, Tremulis had managed a crash program calling for exhausting hours of work by a dedicated crew. They brought an automobile design project from scratch to a recognizable body shape in metal without a clay model (there had been an embryonic 1/8 size clay model of little help). For a production car undertaking this bordered on the ridiculous, but he had done it...Up until the time of our arrival, all efforts had been directed at forging the metal marvel (Tin Goose)."

Phil Egan, Lippincott Team Designer
 RE: by January 14 1947, Preston Tucker, Alex Tremulis and Lee Treese - Tucker's VP of Manufacturing, were off to source new glass to fit the prototype four-door fastback sedan. By then, the fixed-fenders of the car re-incorporated the flowing pontoons from Tremulis' first design renderings. The transition from Lawson's *Torpedo* design to Tremulis' *Tucker 48* design was exceptionally quick. From the date of Tremulis' first reported interview with Preston Tucker to the time when Tremulis' fixed-fender design first appeared, a maximum of three weeks had elapsed. It appears a time span of only six days; from initial concept to final design, elapsed. From that point on, the building of the first prototype would be the focus of attention for the next two months.

431

Second to None



Phil Egan gave credit to Alex Tremulis for the naming of the first Tucker car. The prototype they were working on would be nicknamed the "Tin Goose" out of reverence to Bill Stout's Ford Tri-motor airplane (a/k/a *Tin Goose*). That revolutionary airplane was one of the first all-metal aircraft to be used in civilian transport and had a safety and reliability record that was second-to-none. So much so that it was dubbed: "The Safest Airliner Around." A fitting nickname for Tucker's safety car with its aircraft-inspired looks.

433

All Out

434

"Preston Tucker gave us this charge: to style the car based upon the essentials of his mechanical concepts and upon Alex Tremulis' body layout. At no point in the meeting was there any mention of our changing the fundamentals of wheelbase, wheel tread, interior dimensions or even basic body shape. It was a classic case of pure styling. The primary dimensions were inviolate, as were the the tapering roof, and of course, the Cyclops eye front and center (we were to have fun with that feature). Outside of these requirements, there were no constraints. We were expected to go all out in our efforts."

Phil Egan, Lippincott Team Designer

RE: the transformation from Alex Tremulis' layout into the *Tin Goose* (with no clay - direct to metal) had begun in January 1947. As far as the body's sheet metal was concerned, it was nearly complete by April 1947.

435



As the *Tin Goose* prototype was taking shape, Preston Tucker was satisfied that this new design could be shown to the public. On February 28, 1947, Tremulis was asked to produce the artwork for a series of advertisements that would be used throughout the nation. The body of the car retained the flowing (ponton) fenders.

Above: caption: "One of several drawings produced by Alex Tremulis in Feb. 1947 for advertising the new design of the Tucker '48"

436

At this point in the development of the Tucker 48's styling, all of the design changes away from the earlier *Torpedo* were made by Alex Tremulis and Preston Tucker. The *Torpedo*'s original design was gone, the name was changed to the "Tucker '48," the dimensions of the car were established and the *Tin Goose* build was well underway. Even with the design at this advanced stage, Preston Tucker sought out further styling input. On March 4, 1947, the design firm of Lippincott and Margulies was hired on as consultants to provide some fresh ideas. Shortly after the Lippincott team arrived at the Tucker plant on March 11, 1947, Alex Tremulis was sent on "vacation" for several weeks. This likely coincided with his completion of much of the initial bodywork on the *Tin Goose* as well as completion of Clay No. 1 on or about April 4, 1947. He would return just prior to the Gordon Lippincott team's abrupt departure on May 3, 1947 and finish the *Tin Goose*'s design details that were formally introduced on June 19, 1947.

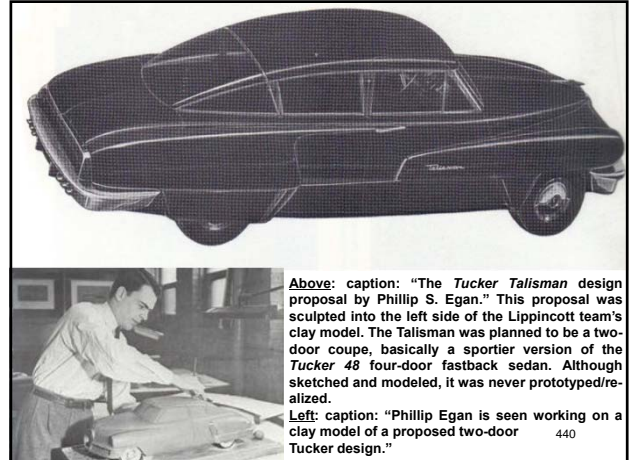
437

By this time, there would finally be enough clay available to build two full-size models; one for the current (Tremulis) design and one for the soon-to-arrive Lippincott and Margulies team. Tremulis had begun work on what would come to be known as "Clay No. 1" shortly before the Lippincott team's arrival at the Tucker plant on March 11, 1947. Arriving with team leader Hal Bergstrom were designers Budd Steinhilber, Tucker Madawick, Read Viemeister and Phil Egan. Tremulis had stated to Egan that he felt the *Tin Goose*'s body was about 95% complete (prior to the Lippincott team's arrival).

438

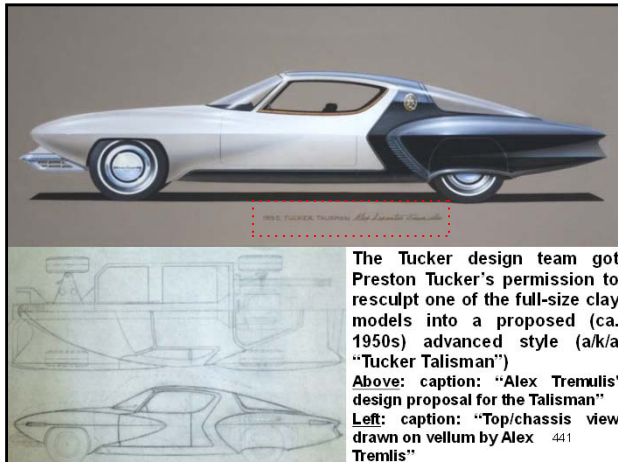
The Talisman

439



Above: caption: "The *Tucker Talisman* design proposal by Phillip S. Egan." This proposal was sculpted into the left side of the Lippincott team's clay model. The Talisman was planned to be a two-door coupe, basically a sportier version of the *Tucker 48* four-door fastback sedan. Although sketched and modeled, it was never prototyped/realized.

Left: caption: "Phillip Egan is seen working on a clay model of a proposed two-door *Tucker* design." 440



The Tucker design team got Preston Tucker's permission to resculpt one of the full-size clay models into a proposed (ca. 1950s) advanced style (a/k/a "Tucker Talisman")

Above: caption: "Alex Tremulis' design proposal for the Talisman"

Left: caption: "Top/chassis view drawn on vellum by Alex Tremulis" 441

The Shapes Arise

442

"A two-man crew worked on the beginnings of a full-size clay model of a car. We could discern a shape in that brownish clay which was clearly the essence of the Tucker '48 I had seen in the newspaper advertisement. I noticed that the details at front and rear were vague, without resolution."

Phil Egan, Lippincott Team Designer

RE: shortly after the Lippincott and Margulies team arrived at the Tucker plant in mid-March 1947, Alex Tremulis was sent on "vacation" for several weeks. This coincided with his completion of much of the initial bodywork on the *Tin Goose* prototype as well as completion of Clay No. 1 (on or about April 4, 1947). Further refinement of the Tucker 48's details were carried out with design input from both the Lippincott team and Tremulis, who would return just prior to the Lippincott team's departure and finish the *Tin Goose*'s design details prior to the public debut.

443

"Here we saw embryonic shapes in raw sheet metal coalescing into the frame and part of the body of an automobile. A nearby drop hammer pounded sheet metal from flat to contoured with ear-splitting vibrations, and the junctions of formed sheet and frame were fused under the bright sparks of welding torches. Elsewhere, men at work stations devoted themselves to the mechanical details of torching, cutting, bending, and drilling the parts of a prototype automobile. Alex Tremulis gave us a cursory introduction to all of this and then led us to the design area. Since he had accepted the position of chief stylist in January, Alex had brought the design of the Tucker automobile from the nebulous to the three-dimensional. He had developed a firm layout of the car which he showed us in a 1/8 size drawing, with every outside and inside dimension carefully indicated."

Phil Egan, Lippincott Team Designer

RE: describing Alex Tremulis' plant tour and his own reaction to seeing the *Tin Goose* prototype for the first time

444

Point Man

445

"Alex Tremulis was primarily responsible for guiding the fabrication of the Tin Goose to conclusion. He was privy to Preston Tucker's decisions regarding those portions of the No. 1 and No. 2 clay models that would be shown to the public. The logistics were mind-boggling. Alex had to coordinate his colleagues in sheet metal forming, body engineering, engine and drivetrain design, interior furnishings, instrumentation/controls and painting to produce the final product to the satisfaction of the boss. It had to be beautiful, it had to be convincing and it had to run."

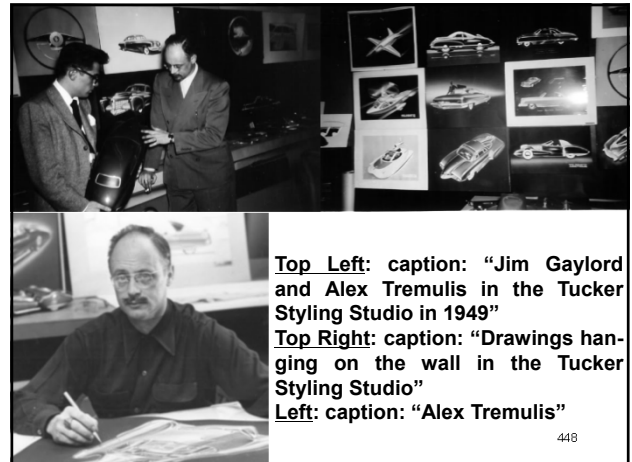
Phil Egan, Lippincott Team Designer

RE: the Lippincott team's styling contributions were completed on May 3, 1947 - before the introduction of the *Tin Goose* to the public on June 19, 1947

446

During the trial of *Preston Tucker*, *Alex Tremulis* was subpoenaed by the court as a witness in the trial. *Robert Downing*, the assistant prosecuting attorney, tried to persuade Tremulis to admit that the name "Tin Goose" implied that the Tucker was a hodgepodge because it was built from an old *Oldsmobile*. Alex insisted that the name *Tin Goose* was a nickname they used in the shop, that it was a form of endearment and that there was nothing in the use of the epithet to imply that the car was a pile of junk. Tremulis later stated that if he knew the name Tin Goose would be used as an instrument to pound nails into the coffin of the *Tucker Corporation*, he would have personally carved the car out of marble.

447



Top Left: caption: "Jim Gaylord and Alex Tremulis in the Tucker Styling Studio in 1949"

Top Right: caption: "Drawings hanging on the wall in the Tucker Styling Studio"

Left: caption: "Alex Tremulis"

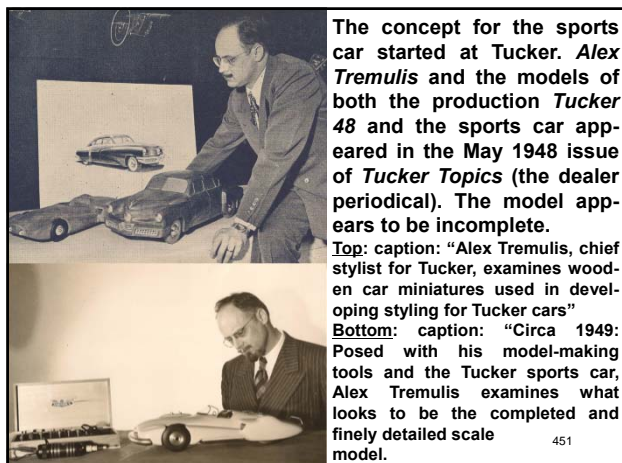
448

Almost Does Count

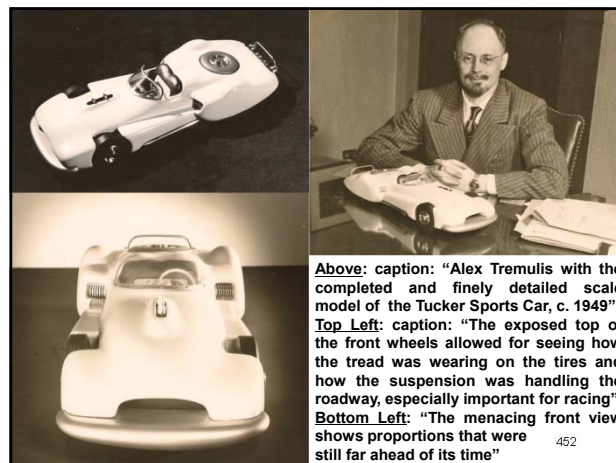
449

For many automobile stylists and designers, the scale model of their latest design is often the first time their vision results in a tangible product that can be held, examined and refined. The model is then often used to gauge interest from other designers, consumers and potential investors in the project. Usually, the model is just a stepping-stone to the next phase for the project. As the final design becomes more and more developed, the original model/s typical fate is to become, at best, an object-of-interest or, at worst, discarded. What makes Alex Tremulis' sports car model so unusual is that it served as design inspiration for several notable car companies spanning over several years. Starting with *Tucker Corporation* and ending at *Kaiser-Frazer*, it took on a life of its own between its corporate duties and almost became a reality in the process. The Tremulis sports car model incorporated state-of-the-art concepts in both streamlining and aerodynamics.

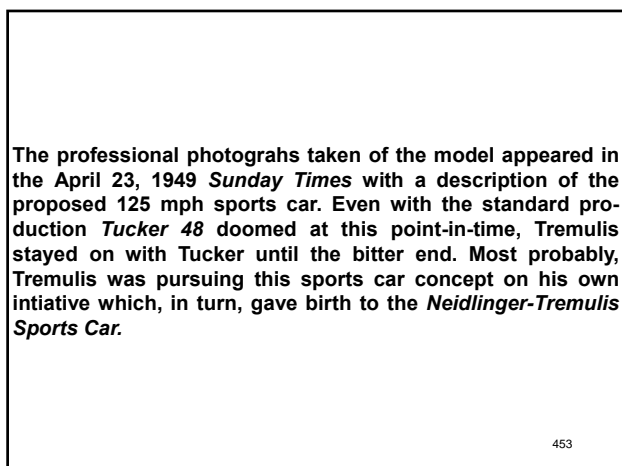
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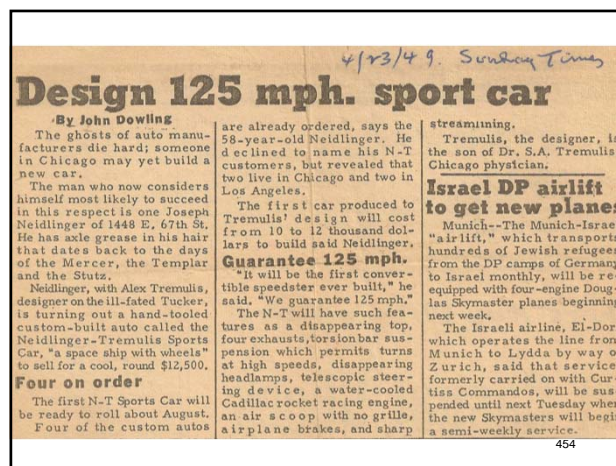
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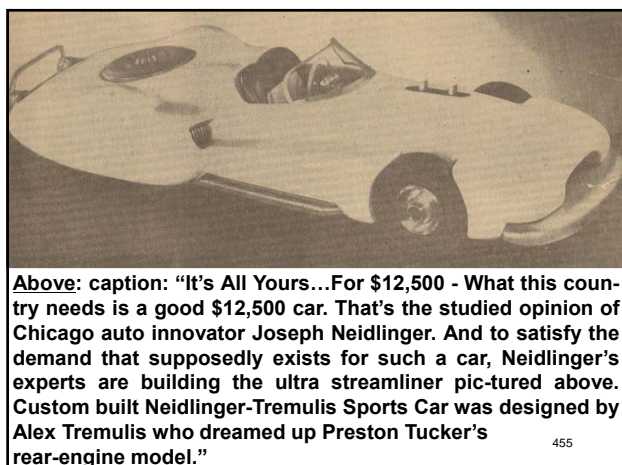
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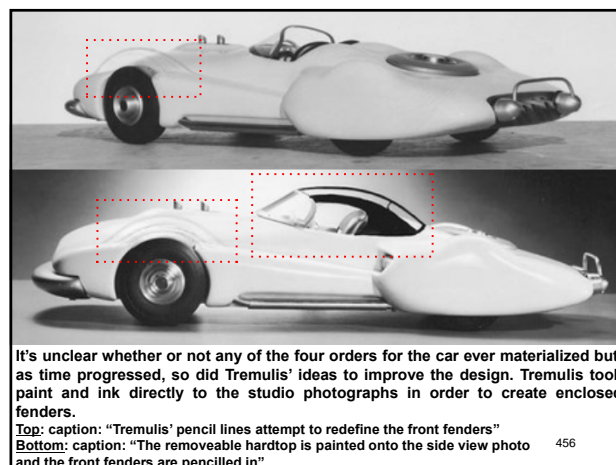
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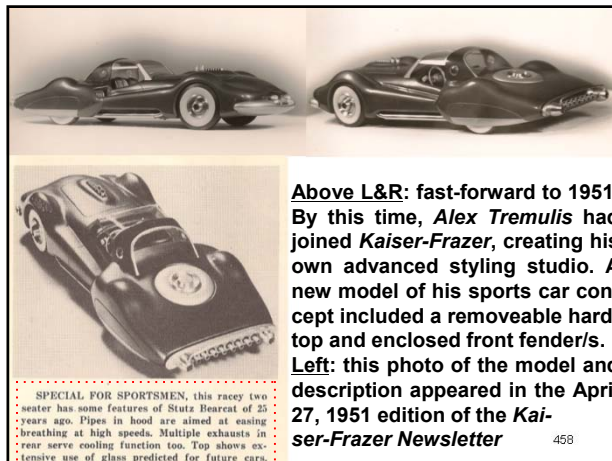
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457



Above L&R: fast-forward to 1951. By this time, Alex Tremulis had joined Kaiser-Frazer, creating his own advanced styling studio. A new model of his sports car concept included a removeable hard-top and enclosed front fender/s. **Left:** this photo of the model and description appeared in the April 27, 1951 edition of the Kaiser-Frazer Newsletter

458

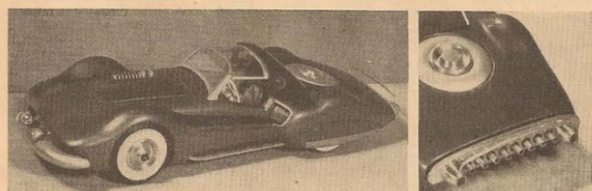


Fig. 10. Model of Tremulis' sports car design has 2 air intake tubes atop the hood, intake at front of rear fenders to increase brake cooling, spare tire mounted on top of rear deck and a row of exhaust pipes at the tail (shown at right). This car would be in the 135-150 mph class.

Above: the October 1951 edition of *Science and Mechanics* magazine picked up on Kaiser-Frazer's future plans and ran these photographs and description of the model. By now, the car's top speed had increased to +135 mph. With K-F's future in doubt, Tremulis was given free-reign to push the limits of his fertile imagination. As part of his 1952 "Styling Unlimited" speech to the *Society of Automotive Engineers* (SAE), his model (now a sports-competition design) included air brakes (on the rear fender fins) and a fighter plane cockpit fairing. Tremulis soon joined FMC (he spent eleven productive years there), applying many of his advanced concepts to both show and production cars.

459



460



"I've gone down on more sinking ships than there are ships left"

Alex Tremulis

RE: after designing for so many failed car companies (Cord-Auburn-Duesenberg, American Bantam, Briggs Design, Custom Motors, Crosley, Tucker and Kaiser-Frazer), Tremulis' first thought when he joined FMC was that this is a company that even he can't bring down.

Left: Chrissie Tremulis, Alex's wife, looks at Alex's K-F sports car model on the hood (Bonnet) of his highly modified MG

461

"Alex S. Tremulis, 77, a design engineer and automobile stylist who designed the body of the futuristic Tucker car, died Sunday in his Ventura, Calif., home. A native of Chicago's North Side, Mr. Tremulis attended Roosevelt High School. As soon as he graduated from high school, he began doing custom design work at the Duesenberg automobile dealership at 333 N. Michigan Ave. He also worked on the Packard Clipper and Chrysler Thunderbolt. At the outbreak of World War II, Mr. Tremulis enlisted in the Army Air Forces and he was assigned to the Wright Air Development Center near Dayton, Ohio. While in the military, Mr. Tremulis designed a two-man aerodynamic torpedo boat that could be used to attack submarines. After the war he was commissioned by Pres-ton Tucker to design the body for his dream car...After the Tucker firm folded, Mr. Tremulis designed cars for the now-defunct Kaiser-Frazer car company. In 1952 he joined the Ford Motor Co., where he was in charge of advance styling...In 1963 he left Ford and opened his own workshop in California, where he helped design aircraft and mobile homes. He also helped with the design of the Subaru X 100...In 1982, Mr. Tremulis was inducted into the Automotive Hall of Fame at Midland, Mich..."

ChicagoTribune.com, December 31, 1991

462

Alex Sarantos Tremulis was born on January 23, 1914 in Chicago, Ill. Though perhaps best known for his work on the Tucker, Tremulis worked for as many as twenty different automobile companies throughout his decades-long career, promoting along the way some fairly radical concepts in automotive design. Reportedly without any formal design training and only a brief aerodynamics course under his belt, Tremulis began submitting unsolicited – and later, solicited – renderings of custom bodies to a Duesenberg dealership in his hometown of Chicago, a persistence that got him in the door at *Auburn-Cord-Duesenberg* as a draftsman for *Auburn*. While with Auburn, he contributed to the Cord and several other A-C-D projects and he eventually became one of the company's lead designers.

463

After *E.L. Cord* stopped building cars, Tremulis went to California (in 1939) where he was hired by the famous tap dancer *Eleanor Powell* to build custom cars for her and to help out *Sid Luft*. Luft had been her public relations man and she wanted to get him started in the customizing business. He had tried several other enterprises, but now he was concentrating on customizing Cadillacs. The first one he built was a well-done custom Cadillac, but instead of selling it, he kept it for himself. When Powell went to Chicago, she hired Tremulis to go to California to put Luft – and the custom car business, on the right track. They had a small shop across the street from the *Luau Restaurant* in Beverly Hills called “Custom Motors,” which designed one-off custom cars for Hollywood stars. After that, he went to work for *Briggs* (where he created the proposal for the 1941 *Chrysler Thunderbolt* show car) and *American Bantam* before joining the *USAAF* during WWII, for which he designed advanced rockets and airplanes.

464



465

“He drove up to the administration building in a top-down Lincoln Continental, trailing a white scarf – and it was snowing out! He dashed in to H.V. Lindbergh and asked flatly what Lindy wanted to see him do. Alex proceeded to run off a series of renderings in the style of all the famous designers – he did a ‘Sakhnoffsky,’ then a ‘Loewy,’ then a ‘Darrin,’ then our own. He was amazingly talented himself, however.”

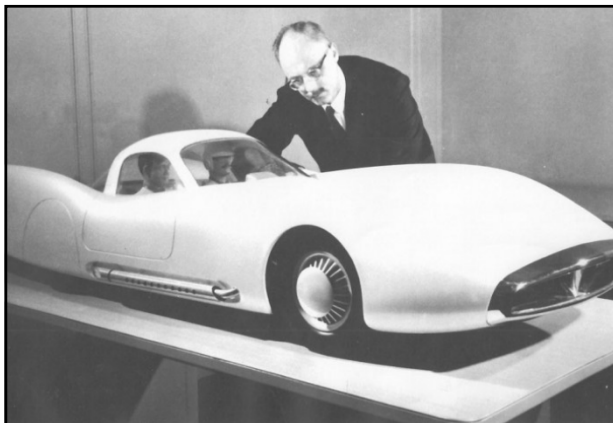
Robert Robillard (Tremulis' predecessor at Kaiser-Frazer)

RE: after the Tucker Corporation's demise, in 1951, K-F hired Tremulis to head up its advanced design department

466

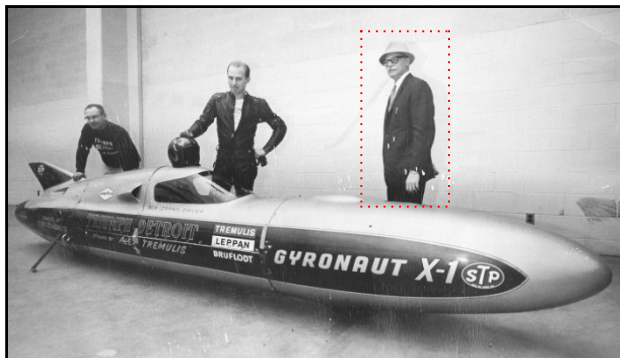
Tremulis didn't stay with *Kaiser-Frazer* for very long. In 1952, he joined *Ford Motor Company*, hired away from K-F by *Elwood Engel* to work initially in the *Mercury Studio* then in the *Advanced Studio*. Over the next several years, Tremulis would create some of the most inspired concept cars to come out of Dearborn, including the two-wheeled *Gyron*, six-wheeled *Seattle-ite XXI*, *X-1000*, *X-2000*, and *Mexico*, all the while advocating his then-revolutionary ideas on extreme aerodynamics and gyroscopic stabilization for cars. He would also prove to be a thorn in the side of his superiors and the corporate culture at FMC, in general, which led to many confrontations, demotions and, ultimately, his resignation from the company in 1963.

467



Above: caption: “Tremulis with the Mexico concept”

468



After leaving FMC, Tremulis began his own design firm, contributing to the *Subaru BRAT* in the 1980s. He also doggedly pursued his ideas of gyroscopically stabilized two-wheelers over the next several years with the *Gyronaut X-1* (above) and the *Gyro-X*, both of them fully functional vehicles. 469



470

For his lifetime of achievement in the field of automotive design, in 2014 the *Automotive Hall of Fame* posthumously inducted *Alex Tremulis* (Tremulis died at the age of 77 in 1991). The AHF previously honored Tremulis with its *Distinguished Service Citation* (in 1982).

471



472

Design By Committee

473

"I don't know how Tucker found us. Tucker needed \$25 million to begin full production, so he had to design, engineer and sell the car on spec in a hurry. Although excited, we had to send half our design staff to Detroit, so we insisted on payment each week in advance...He was an immensely likeable and persuasive person"

J. Gordon Lippincott

RE: recalling in 1988 how one fine day in 1947, *Preston Tucker* arrived, unannounced, at the midtown Manhattan offices of the design firm *Lippincott & Margulies*. Lippincott's partner (*Walter Margulies*) insisted on being paid each week in advance, Tucker agreed. Tucker told Lippincott that his chief designer (*Alex Tremulis*) already had drawings and a scale model of what the car would look like and he wanted advice from a design firm on the outer styling of the car. Five of L&M's ten designers were sent to Chicago to work with Tremulis. In nine weeks, they created a full-scale model (Clay No. 2) besides the one Tremulis was already working on (Clay No. 1). J. Gordon Lippincott sold his interest in L&M in the late 1960s.

474



"Tremulis deserves most of the credit for the car design, but that the front and back of the car reflect the Lippincott team's work...it's hard to pinpoint responsibility when many designers have a hand in a project."

J. Gordon Lippincott

RE: Lippincott stated that once the clay models were completed (on May 3, 1947), it was left to Preston Tucker and Alex Tremulis to assemble the prototype and the cars themselves. Lippincott & Margulies involvement was over. The Tucker 48 represented the best design elements from each of the designers that contributed to its creation. When the final design was presented to an eagerly awaiting press and public on June 19, 1947, few could argue with the aesthetic results. 475



"...We were one of the few companies that did not lose money on the Tucker. But I wish we'd taken some of our design fees in cars. They're worth a fortune now."

J. Gordon Lippincott (1988)

476

Rear-End

477

The rear grille of the Tucker 48 best exemplifies how each of the designers involved with the Tucker were able to contribute to the final design for the rear end of the car. The egg-crate grille was a carryover from George Lawson's 1942 Buick design that he used for the first Tucker Torpedo design. It would be Tremulis who would apply the same theme to the rear-end of the car.

478

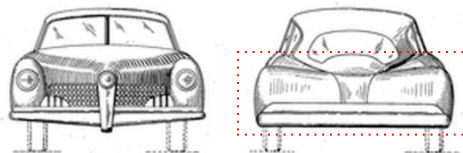
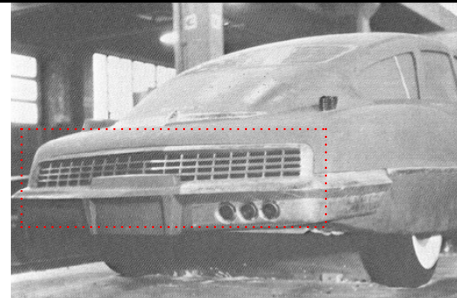


FIG. 3

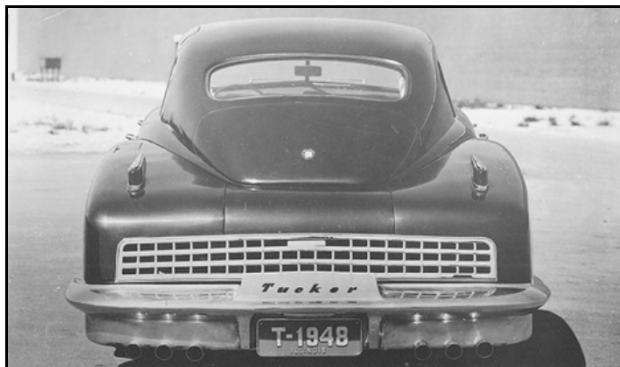
FIG. 4

From December 1946 through January 1947, Alex Tremulis first applied the egg-crate grille as two rows on his first proposals to Preston Tucker. This rear-end treatment would soon be replaced by the one shown in the patent illustrations two months later. On March 15, 1947, Tremulis' rear-end design had changed as of the patent filing (Fig. 4). The non-descript back end was now devoid of the egg-crate grille (highlighted). 479



By May 1947, the rear grille of the Lippincott Clay No. 2 reincorporated the egg-crate. Tremulis' initial two rows of square holes were replaced with four rows of rectangular slots that mirrored the front grilles. Tremulis would confirm that he felt this design on the rear of Clay No. 2 was excellent.

Above: caption: "A rear view of Model No. 2. The rear window was too high, and exhaust pipes were set into the foiled bumper." Note the four rows of rectangular slots in the rear grille. 480



Above: caption: "June 18, 1947: The rear of the Tin Goose." The grille was modified for three rows and the individual exhausts were moved from within the bumper to half-underneath the bumper. The Tucker nameplate was added to the riser on the bumper. 481



482



483

Taillights

484



"They (Lippincott) worked on that model several months, and when they got through the only part of their design that was used was the two taillight castings. They were undoubtedly the most expensive taillights in automotive history." Alex Tremulis

RE: the Lippincott and Margulies team provided significant input towards the final design of the Tucker 48, however, Tremulis was probably right about the cost of the Tin Goose's cast taillights (vendors were known to overcharge Tucker for both products and services). 485

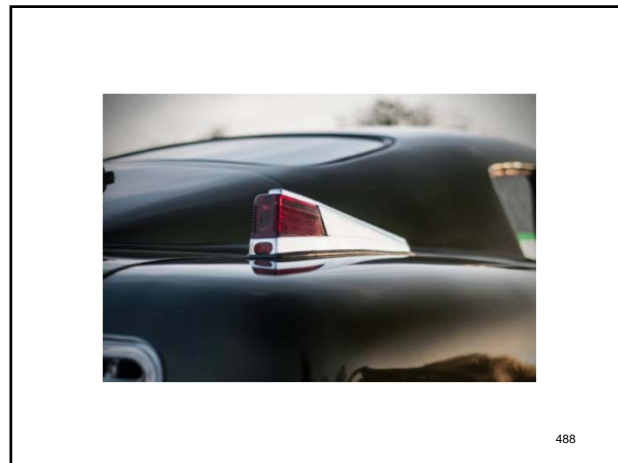
"Our idea of a long bright metal form with a lens at the end, resting on top of each rear fender, became a cause celebre. A number of Tucker personages put in their two cents on how it could be achieved. It was really quite simple: use a chromium-plated die casting for the front part and acrylic plastic molded in clear red for the lens. It would require die casting and injection molds costing probably eight thousand dollars at the time, a pittance compared to the tooling costs for an automobile. However, we soon discovered a reluctance on the part of the company to undertake such a specialized custom artifact. Due to time and financial constraints, almost all of the parts for the Tucker '48 were going to be bought outside and brought into the plant to be assembled. Thus the solution was to seek an existing tail light design and plan on using it. A pre-war Dodge design was eventually used."

Phil Egan, Lippincott Team Designer

RE: the taillights for the 1941 Dodge Business Coupe and Luxury Liner are immediately recognizable in comparison to the Tucker 48 486



487



488



The taillights on Clay No. 2 were modernized versions of the Dodge taillights, with a sleeker profile, squared-off edges, and a much cleaner look. However, these unique *Tin Goose* taillights reverted back to the 1941 *Dodge* design, with a more rounded look and a heavy chrome cap to hold the lens in place. The final taillight design was similar to the sleek Lippincott design on Clay No. 2, with the leading edge lens angle reversed, combined with the top cap similar to the 1941 *Dodge*. The first 25 cars had one casting and, due to a rear fender shape change, the last 25 cars were finished with a different contour to the casting.

489



490

Rear Air Intake

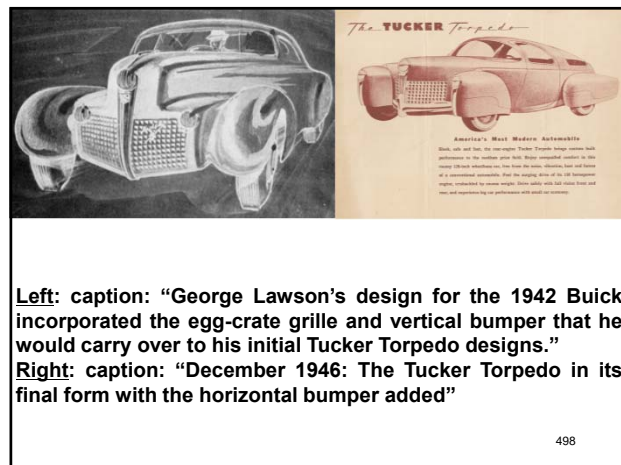
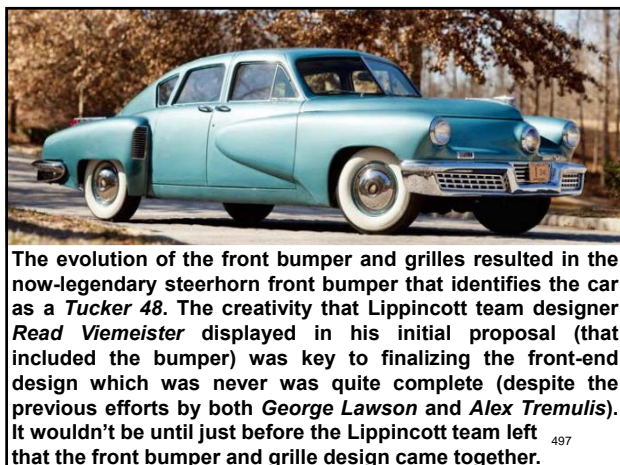
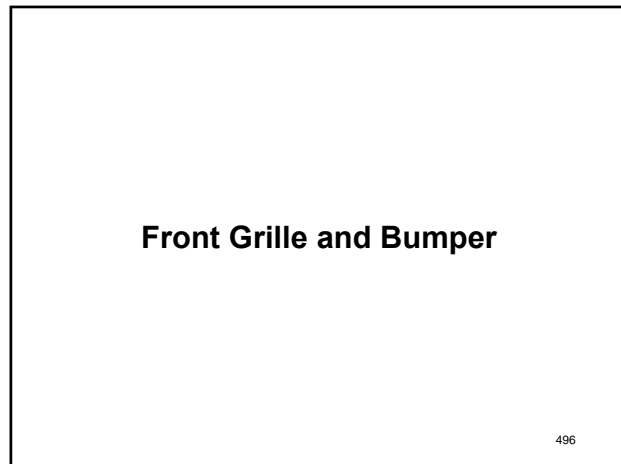
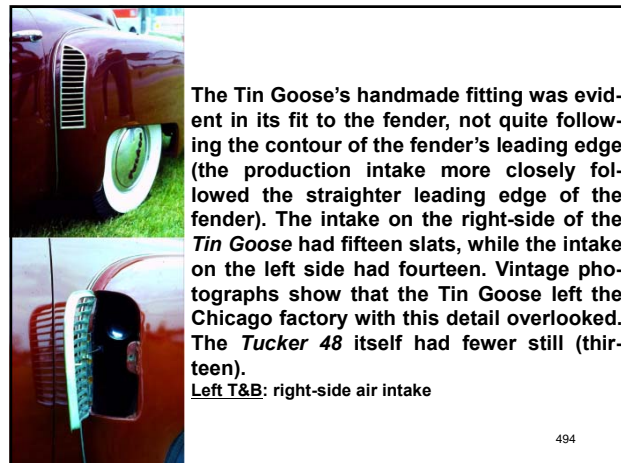
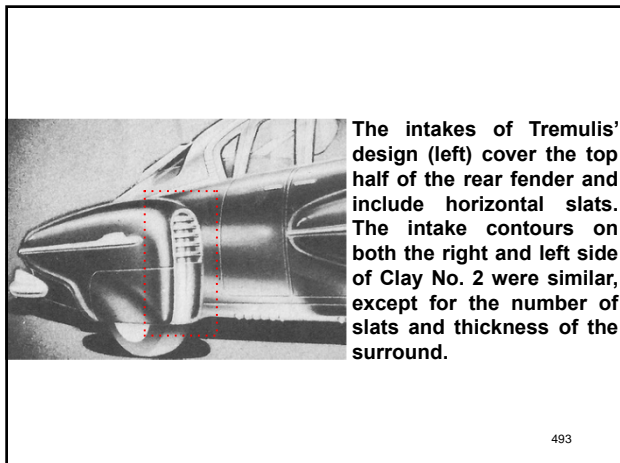
491

"The two competing projects (Tremulis' Clay No. 1 and Lippincott's Clay No. 2) had become increasingly inter-dependent. It simply wasn't possible for each to ignore the travails of the other. Alex didn't ignore what we were doing and made many suggestions which helped us. We, in turn, contributed a few ideas to him; certainly a just aid to a worthy compatriot. A constrained delicate and very successful rear fender air intake on the No. 1 clay model was one of the results of this cooperative effort. Ultimately, it was Alex's accomplishment, but Read Viemeister and Budd Steinhilber contributed ideas which helped carry it off."

Phil Egan, Lippincott Team Designer

RE: the *Tin Goose* intakes were a collaboration of both Tremulis and the Lippincott team's efforts. The *Tin Goose*'s handmade fitting is evident in its fit to the fender, not quite following the contour of the fender's leading edge. The production intake more closely follows the straighter leading edge of the fender.

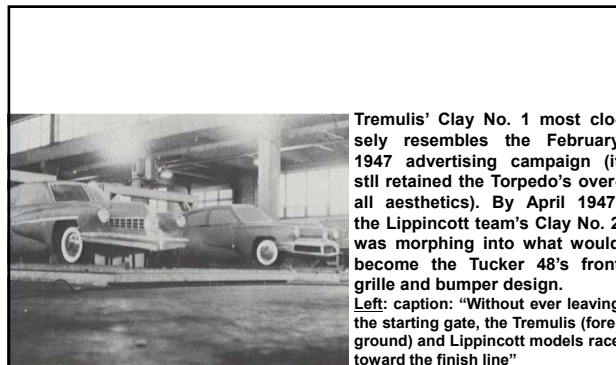
492





Above: caption: "February 1947: Tremulis' redesign of the Torpedo into the Tucker '48 maintained Lawson's design elements including the egg-crate grille and both the center vertical and horizontal bumpers." Just prior to the arrival of the Lippincott team in early March 1947, Read Viemeister drew up a Tucker proposal that the Lippincott team kept coming back to. The bumper was probably the very first incarnation of the Tucker 48's "Steer Horn" bumper. This concept would prove pivotal in the front-end design for the *Tucker 48*.

499



Tremulis' Clay No. 1 most closely resembles the February 1947 advertising campaign (it still retained the Torpedo's overall aesthetics). By April 1947, the Lippincott team's Clay No. 2 was morphing into what would become the Tucker 48's front grille and bumper design.

Left: caption: "Without ever leaving the starting gate, the Tremulis (foreground) and Lippincott models race toward the finish line"

500



501



By May 1947, the front end of Clay No. 2 now incorporated Read Viemeister's steerhorn bumper as the backbone for the grillework. As of June 1947, the Tin Goose's front bumper and grille would remain virtually intact with the exception of a few missing slats in the centerpiece. The catwalk area above the bumper eliminated all chrome pieces, additional grilles, vents and/or turn indicators (as on both clay models). Tremulis did much of the lead solder filling and shaping on the deep drawn areas in the catwalk himself. The Tucker 48's front-end would add turn indicators to the areas just above the bumper, but remained, in essence, true to the spirit of the *Tin Goose*.

502



503



Left: caption: "Putting the finishing touches on the Lippincott model are, at left, project manager Hal Bergstrom, Budd Steinhilber, and Philip Egan; with his hand on the door handle is Walter Margulies, J. Gordon Lippincott's business partner"

504



505

Silhouette

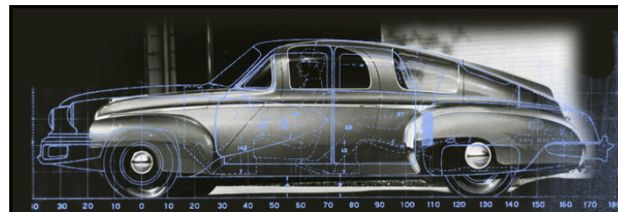
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"...The dimensions set up at this time were, with few exceptions, the ones that were used in the final body design. There was no great attempt at styling, though the side silhouette was nearly identical with the finished design. An extra four inches were allowed on wheelbase, because Tucker was still insisting on fenders that turned with the wheels, and the production man said there would be plenty of time to talk him out of that later..."

RE: excerpt from *The Indomitable Tin Goose* by Charles T. Pearson (1960). As described in Pearson's book, the basic outline for the side silhouette of the car was dimensionally worked out by Tucker's planners in December 1946. It would be these same dimensions that Tremulis would use for his first sketches and the those that went into the build for the *Tin Goose* prototype. Thus, the passenger compartment of the *Tucker 48* follows the same basic dimensions of George Lawson's *Torpedo* design.

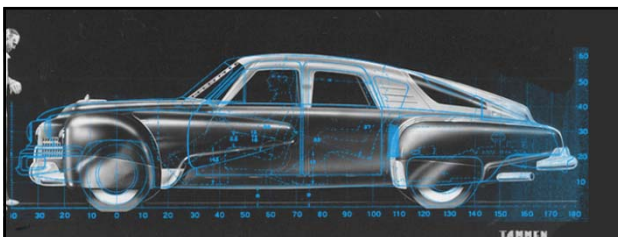
507



The windshield (probably the fire wall also) was moved forward approximately 10-inches, but the roofline profile of the final design for the *Tucker 48* (in blue) - as of September 1947, matches the roofline for George Lawson's plaster model for the *Torpedo*. Every interim design matches as well including Tremulis' original sketches from January 1947, Tremulis' advertisements for March 1947, the March patent illustrations, the Lippincott Clay No. 2 (most probably Clay No. 1 as well) and, finally, the *Tin Goose* itself.

508

Above: caption: "Tucker Torpedo vs. Tucker '48"



A comparison of Alex Tremulis' earliest renderings for Preston Tucker in December 1946 to the final tooling dimensions as of September 1947, reveals that the dimensions remained little changed throughout the development of the *Tin Goose* and the production Tucker 48s, confirming Pearson's accounting of events. The doors, window locations and fender contours for the final *Tucker 48* design were, in fact, changed very little.

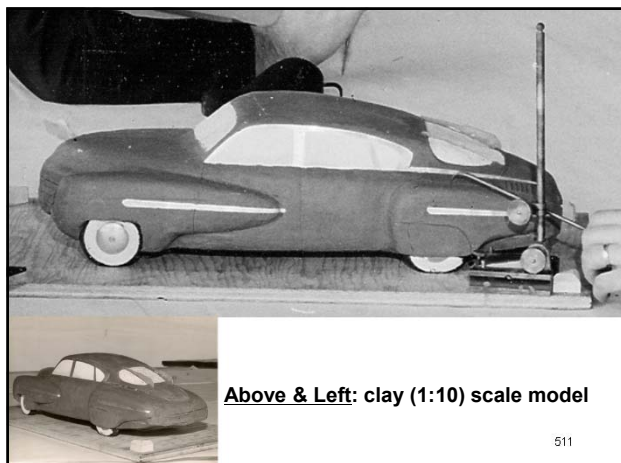
Above: caption: "Tremulis Initial Concept vs. Tucker '48"

509



Above: the full-scale drawing on the back wall of the design studio supports the accurate dimensions for the initial building of the *Tin Goose* (going direct to metal) while the small (1:10) scale clay model provided the necessary dimensions for the design change from cycle to fixed pontoon fenders. Most likely, the other men in the photograph with Alex Tremulis (front right) are Tucker's expert metal shapers; Al McKenzie, Herman Rigling, William Stampfli and Emil Deidt. It appears that a new full-sized drawing is being prepared of the flowing fender design that became the *Tin Goose* (there were several layers of metal on the *Tin Goose* because of the many design changes). The metal body of the *Tin Goose* was always a work-in-progress from the very beginning; constantly changing throughout the first half of 1947 - right up until its introduction on June 19, 1947.

510



511



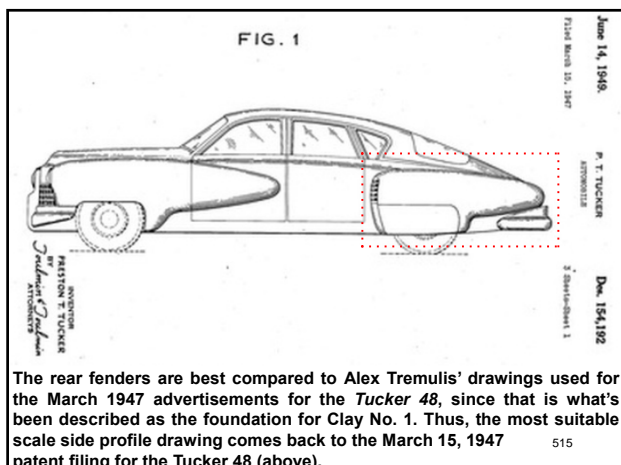
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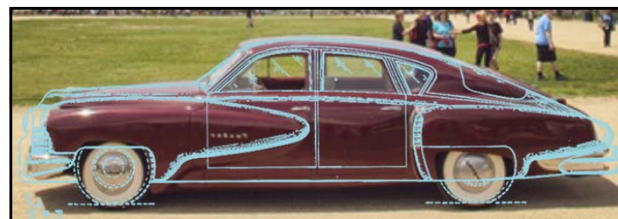
513

Rear Fenders and Side Windows

514

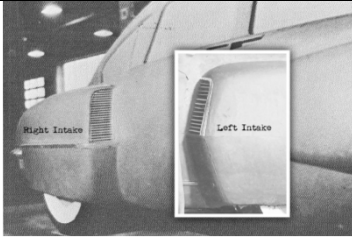


515



Above: comparing Tremulis' rear fender to the patent filing shows a near-perfect match of contours and intake location. Additionally, the side windows on the *Tin Goose* are in the exact locations as the patent drawing (in blue). Tremulis stated that, as of March 1947, \$1 million had been spent on the tooling for the locked-in dimensions on the rear of the car. This comparison confirms that the design had not changed from at least as early as Feb. 1947 through the June introduction of the *Tin Goose*.

516



Both sides of Lippincott Clay No. 2 show a distinctly different profile to the rear fenders on the *Tin Goose*. The leading edge was more of an arrowhead design than the fully curved contour of Tremulis' advertising and the patent application. Similarly, the opera windows on both sides of the Lippincott Clay No. 2 show they were extended more rearward (for improved visibility) than the *Tin Goose*. *Phil Egan* noted that the left side of Clay No. 2 was only used as potential styling for a 1950s model. Most probably, the rear of the *Tin Goose* was complete by this time which would explain why the extended windows were not implemented on either the *Tin Goose* or the production *Tucker 48*. *Alex Tremulis* would reintroduce the better visibility of the wrap-around rear window later in 1948.

Above: caption: "By mid-April, 1947, the rear engine air intakes had been refined, 517 and the rear quarter window had been extended back to provide more visibility"

Front Fenders

518



The shape of the front fenders, along with the Cyclops headlight, are instantly recognizable features that immediately identify the *Tucker 48*. The front fenders changed very little from the time Tremulis arrived on the scene in early 1947 to the demise of *Tucker Corporation*. Their length and top profile were consistent from start to finish, with slight modifications to the lower contours, remaining faithful to *Alex Tremulis'* vision.

Top: Tucker 48 Christmas card
Bottom: *Alex Tremulis* 519 (highlighted) with his creation



520



521



"Any creation is an expression of its creator"
Ancient Proverb

522

Part 5

The Eye of the Beholder

523

Plain Talk

524

“Quite a few readers have written me asking why Popular Science has never had a piece about the much-publicized Tucker car. Some letters mention the articles and photographs that have appeared in newspapers and other magazines. Others ask what we think of the car and the innovations described in the advertisements. This situation points a blunt finger at an important editorial commandment of Popular Science. This magazine aims not only to report what is new or what it means, but also how it works. So we have to know more than most publications to get a story into our kind of pictures and print...”

Popular Science, February 1948


RE: excerpt from an editorial entitled *Plain Talk About the Tucker*

525

Our Kind of Meat

526

*for an easy going life
...let Dynaflo do it*



all you have to think about

Controls for Dynaflo Drive are just about as simple as you can imagine.

A foot-brake, an accelerator and the control lever under your wheel—that's all there are. No clutch pedal and no gearshift lever of the usual sort.

Now look at the various positions of the control lever, starting at the left.

There is "P" for PARKING—the position in which you leave the control when you park. To drop a car into gear, as it is so disconcertingly back and forth—no more guesswork but this way of parking looks

This is also one of the two positions for starting the engine.

There is "N" for NEUTRAL—just like neutral on any car. Use it in the same way.


In this position your car wheels are disengaged from the engine. So don't leave

“...A fine example of how we must answer to you readers (and the ever-present experts in everything among you) is the story of Buick's new Dynaflo in this issue. From the time we heard the first trade rumor that Buick was readying a really new kind of transmission, we knew this was our kind of meat...”

Popular Science, February 1948

RE: excerpt from an editorial entitled *Plain Talk About the Tucker*. “Dynaflo” was the trade name for a type of two-speed automatic transmission that was built for Buick from 1947 to 1963. The Dynaflo set itself apart from its competition with its ability to shift smoothly from one speed to the next - a vast improvement over most automatic gearboxes of the era (they tended to lurch their way through gear settings). It was also a vindication of torque converter-equipped transmissions, setting the standard for their use up to the present day.

527



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Page 88

"...We assigned a reporter. He checked through General Motors in New York, caught a plane to Detroit. He drove a car equipped with Dynaflo and was quickly convinced it was one of the biggest automotive stories ever. But, while understanding what it does was easy, explaining how it works was one of the toughest nuts ever cracked with a typewriter and a sketch pad. Our man spent hours that stretched into days groping through blueprints, pouring over texts on hydraulics, interviewing engineers, probing other manufacturers for reactions..."

Popular Science, February 1948

RE: excerpt from an editorial entitled *Plain Talk About the Tucker*

529

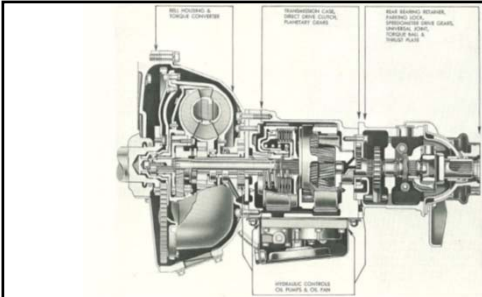


Research on automatic transmission design at Buick began in the early 1930s with research into using fluid couplings to transfer power to gear-shifting mechanisms. By the end of the decade, GM engineer Oliver Kelley was persuaded that the key to a true automatic gearbox lay in the use of a special type of fluid coupling called a torque converter. Work for civilian applications was halted during WWII, but Kelley's concepts were used to design the famous *Hellcat* tank-killer. After WWII, research continued and by 1948, the *Dynaflo* was a standard option on the Buick Roadmaster.

530

Drivers loved the way the new transmission shifted imperceptibly from one speed to the next (unlike the competing *Hydramatic*, which did so abruptly and often noisily). On the other hand, users complained that the unit seemed to slip and make strange sounds prior to reaching optimum driving speed. Nonetheless, the Dynaflo was a hit and by 1954, 85% of Buicks came with the new transmission. The Dynaflo's reliance on its torque converter was both its greatest strength and most pronounced weakness. In its earliest versions, it employed a converter with five elements, including two stators. These caused turbulence during all phases of operation, including the coupling phase. The vehicle itself started in high gear, relying on the converter to boost acceleration. The process was slow, earning the transmission the nickname "Dynaslush" (due to its lack of initial "get-up-and-go"). Despite these misgivings, drivers enjoyed the smooth acceleration the design allowed.

531



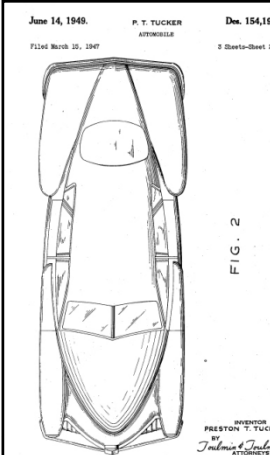
In 1953, Buick went back to the drawing board, releasing the *Dynaflo* in a new "Twin Turbine" design. Buick reduced the number of stators to one, added twin turbines and linked one turbine to the ring gear and the other to the planet gears. This boosted engine performance while retaining smoothness of operation. The *Twin Turbine* also included a rear pump, which allowed for push (a/k/a "pop") starting.

Above: caption: "The Twin Turbine Dynaflo of 1953 reversed some of the theories behind the Dynaflo I terms of torque converter arrangement, but it continued on the road towards eliminating the gearing and doing more with hydraulic means"

532

Does Macy's Tell Gimbel's?

533

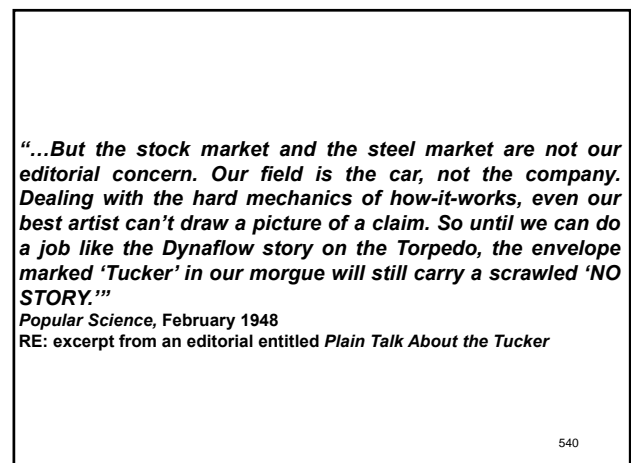
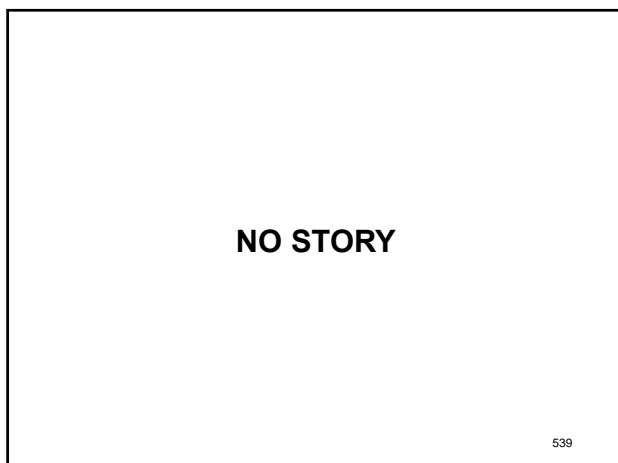
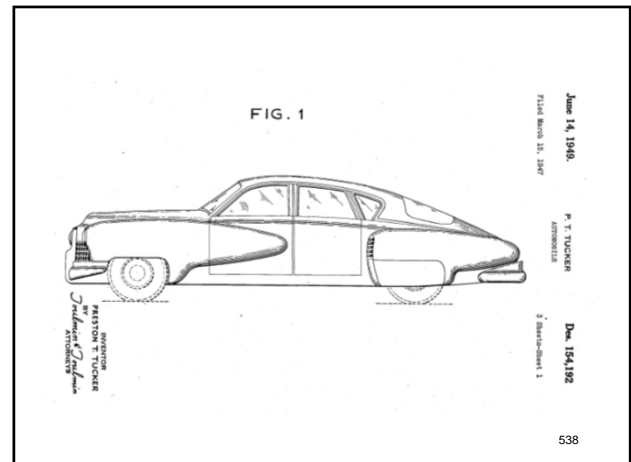
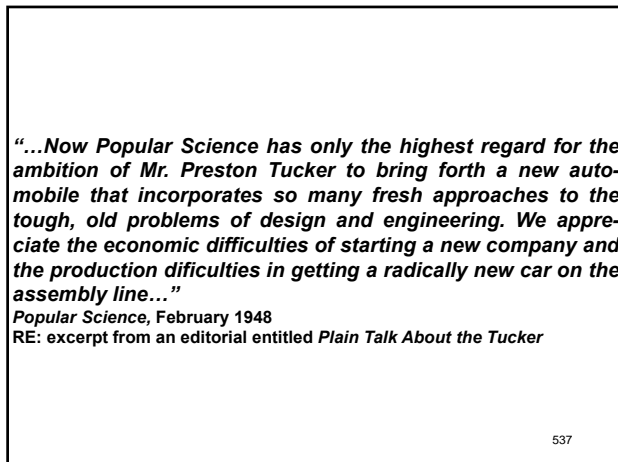
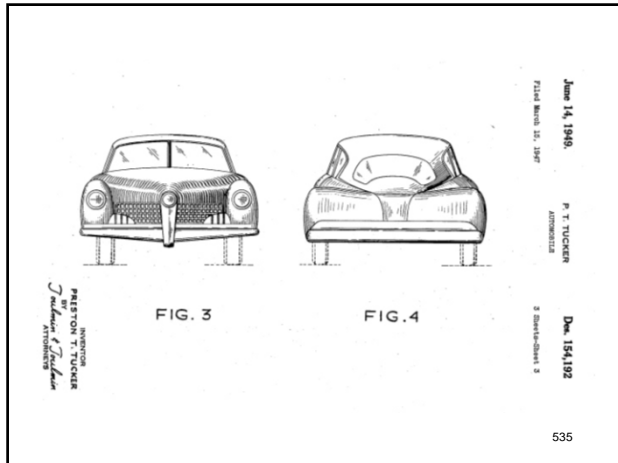


"...The same man has been chasing the Tucker story in the same way for months. So far, we haven't caught it. And it isn't because we haven't tried. We've had reporters scouting New York, Detroit, and Chicago. Our man poked around the the polished exhibition chasis. He was told the power from the rear engine was delivered to the rear wheels through hydraulic torque converters. He asked how they worked. The Tucker people said it was a secret..."

Popular Science, February 1948

RE: excerpt from an editorial entitled *Plain Talk About the Tucker*

534



Squeeze Play

541

"Simmering here is a battle involving big steel, big autos and charges by Preston Tucker of an industrial squeeze play. Mr. Tucker, ex-racing car designer is fighting for a 28-million-dollar surplus steel plant in Cleveland. He wants it to supply his 87-acre Chicago plant where the production of the rear drive Tucker Torpedo auto is under way..."
The Pittsburgh Press, January 25, 1948

542

"...His opponent is Republic Steel Corp., which operated the steel works for the government during the war and still occupies it. They were the only bidders to appear at the War Assets administration, Government disposal agency, which has their bids under advisement. With too few regular suppliers, Mr. Tucker, newest comer into the auto field, has run into steel troubles because of the general shortage. He told reporters here that he has 'got to have' the Cleveland plant and will 'fight to the last ditch to get it'..."
The Pittsburgh Press, January 25, 1948

543

J'accuse!

544

"...Mr. Tucker's anxiety is heightened by the fact that, with surplus steel facilities having moved well, the Cleveland setup offers the last good chance for an auto maker or anyone else to get a ready-built plant from WAA. Mr. Tucker claims he submitted the best bid, claims that WAA should award him the plant without delay, accuses big steel and big autos of using pressure to try to freeze him out..."
The Pittsburgh Press, January 25, 1948

545

Among Other Things

546

"...He scoffs at critics who say he couldn't operate the Cleveland plant if he got it, says he has hired steel mill experts - one from Ford - and can get more. Republic Steel tells WAA that the Cleveland plant supplies steel to some 200 manufacturers in that area, whose supplies would be greatly reduced or eliminated if Mr. Tucker got the plant. They make materials for housing, farm and automotive equipment, among other things, says Republic's president, O.M. White."
The Pittsburgh Press, January 25, 1948
 RE: in the end, Preston Tucker lost his battle to obtain the Cleveland steel plant

547



Above: caption: "Republic Steel's Cleveland works in 1949"

548

Of His Own Making

549



"...Tucker is the guy who was going to bring out a revolutionary car in the '40s. He ran into a lot of problems, many of his own making, and the car never got off the ground...He had an imaginative car ahead of its time, at least in looks...The car was made in Chicago. A few early jobs were shipped to Detroit and reporters were invited out to 8 Mile Road for a ride-and-drive. I was there and the thing that sticks in my memory is that the car had no reverse gear. You couldn't back it up. How the heck could you sell a car without a reverse? To be fair, the company eventually turned out a small number of cars with reverse..."

Robert Lund, March 1975

RE: excerpts from his Detroit Listening Post column (in Popular Mechanics magazine)

550

Mr. Car Test

551

"Last Month we completed ten years of car-testing. More than 250 tests ago, in the February 1946 issue, Mechanix Illustrated published the first automobile test articles ever seen in America. Selling this series was tougher than trying to juggle pyramids as no other publication had ever had the guts to write both the good and the bad about Detroit. Since we started this controversial hassel, imitators have risen up like, mosquitoes in a tropical swamp and more guys have stolen our car-testing idea than you could find in all the Federal pens..."

Tom McCahill

RE: in the March 1956 issue of Mechanix Illustrated magazine, Automotive Editor McCahill recalled his ten years of writing on everything automotive for MI in an article entitled *My Ten Years of Car-Testing*


552

Automotive journalist *Thomas Jay McCahill III* (1907-1975) was born the grandson of a wealthy attorney in Larchmont, NY. After graduating from *Yale University* with a degree in Fine Arts, McCahill managed (and later owned) *Murray's Garage* in NYC. In the mid-1930s, he became a salesman for *Marmon* and operated dealerships in Manhattan and Palm Springs, featuring *Rolls Royce*, *Jaguar* and other high-end luxury cars. Unfortunately, the depression and his father's chronic alcoholism wiped out his family's fortune. During WWII, he wrote articles on a variety of subjects for magazines such as *Popular Science*, *Reader's Digest* and *Mechanix Illustrated* (MI). Hitting on the idea that an auto-starved post-war public might be interested in articles on new cars, he sold the concept to MI. In February 1946, his first report was on his own 1946 Ford. McCahill's opinions were fearless thus, he endeared himself to some while villainizing himself to others in the Detroit automotive world. A personal friend of *Walter P. Chrysler* and, at six-foot, two-inches tall and weighing 250 pounds, he once fought-off three goons (allegedly hired by *General Motors*). According to Detroit folklore, he sent two to the hospital while the third turned-tail and ran for his life. On many of his early MI road tests, his wife *Cynthia* would accompany him as his photographer and, nearly always, his black Labrador Retriever, "Boji." McCahill frequently used extreme metaphors and similes in his prose. For example, he proclaimed the ride of a 1957 *Pontiac* to be "smooth as a prom queen's thighs." Tom McCahill is credited with creating the "0 to 60" acceleration measurement (now universally accepted in automotive testing).

553




554



McCahill reports on

The 1960 Cars

New models, new styles and new engines are featured in this most exciting automotive year!



“...Selling the articles to MI was only the first step, perhaps the easiest. The hard deal was selling the manufacturers the idea of letting me run tests on their first post-war offerings. I was bluntly told by several, ‘We test our own cars and aren’t interested in outside opinions.’ With hundreds of thousands of post-war orders in hand immediately after V-Day, many of the manufacturers were as independent as a bowl of garlic and their interest in Tom McCahill could easily be termed static. So, in order to keep this series from dying at birth, I donned my Liars’ Club suit and descended on the City of Steel Stampings in the guise of a photographer...”

Tom McCahill, MI Automotive Editor (March 1956)

555

“...I took endless pictures of company big-shots smiling happily with their new cars. After that I would persuade the proud executive that I had to take the car for a short run into the country to get more flattering picture backgrounds. On these junkets I was usually accompanied by a company public relations man, whom I contrived to lose in one way or another while I borrowed the car ‘for a moment’ and forgot to come back for several hours. Once I had managed to get one of the proud beauties alone, I drove hell out of it and the results were the first professional automobile tests ever conducted for an American publication. Sometimes I had a little explaining to do, like the time when I was towed back to the factory at the end of a rope with a completely blown engine, or again when a roof got slightly flat on top from trying the car’s upside-down approach...”

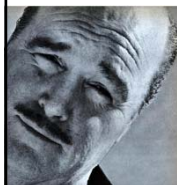
Tom McCahill, MI Automotive Editor (March 1956)

556

“...The 1946 Ford was the first car we tested. In the same issue we ran the first Buick test, which was done in an automobile I drove out of a freight car in the New York Central yards in New York. The Ford piece opened the door for later tests on Chevrolet and Plymouth. The Buick story helped me crack the higher-priced field...”

Tom McCahill, MI Automotive Editor (March 1956)

557



“...As Hugh Ferry, former President of Packard and Chairman of the Board, told me just a few days ago, ‘Everyone in the industry hated your guts but we all respected you.’ This was one of the biggest compliments I’ve ever had. When the copyists came along with their car tests several years later, the road had been smoothed for them by our articles...”

Tom McCahill, MI Automotive Editor (March 1956)

558

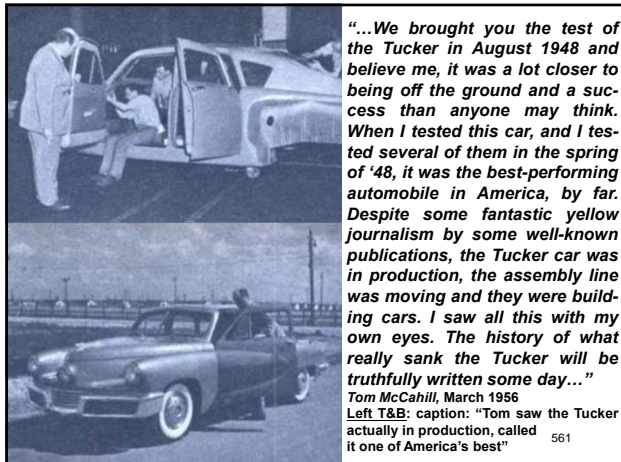
One of America's Best

559

"...The post-war era saw many attempts to pluck the billion-dollar bud from a car-starved market by men who never manufactured automobiles before. In 1945 and '46 any guy with a slightly clean blueprint and a hazy idea for building a car immediately got thousands of volunteer backers who sank basketloads of money into these ventures. The most notorious and publicized company of them all was the famous Tucker. Hundreds of dealers signed up to handle this still-unborn car and thousands of dollars were invested in a vehicle which was heralded as the first new thing in transportation since they wheeled a wooden horse into Troy. Everything from its Cyclops Eye and streamlined body to its aircraft engine in the rear was all new..."

Tom McCahill, MI Automotive Editor (March 1956)

560



"...We brought you the test of the Tucker in August 1948 and believe me, it was a lot closer to being off the ground and a success than anyone may think. When I tested this car, and I tested several of them in the spring of '48, it was the best-performing automobile in America, by far. Despite some fantastic yellow journalism by some well-known publications, the Tucker car was in production, the assembly line was moving and they were building cars. I saw all this with my own eyes. The history of what really sank the Tucker will be truthfully written some day..."

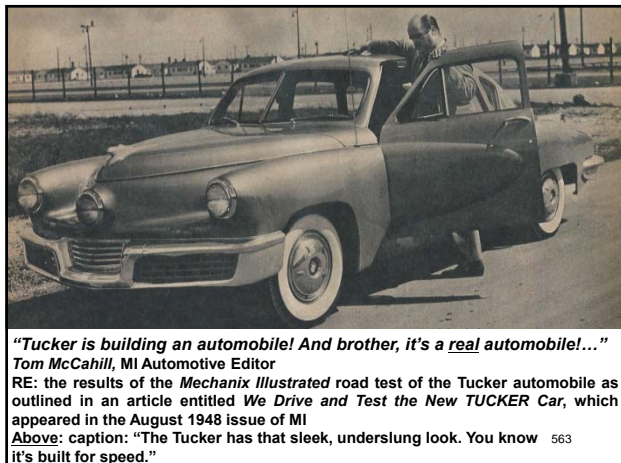
Tom McCahill, March 1956

Left T&E: caption: "Tom saw the Tucker actually in production, called it one of America's best"

561

You'll know What I Mean

562



"Tucker is building an automobile! And brother, it's a real automobile!..."

Tom McCahill, MI Automotive Editor

RE: the results of the *Mechanix Illustrated* road test of the Tucker automobile as outlined in an article entitled *We Drive and Test the New TUCKER Car*, which appeared in the August 1948 issue of MI

Above: caption: "The Tucker has that sleek, underslung look. You know it's built for speed."

563

"...I want to go on record right here and now as saying it is the most amazing American car I have seen to date; its performance is out of this world. Why do I think so? Wait until you have had the opportunity to drive the car and you'll know what I mean..."

Tom McCahill, MI Automotive Editor (August 1948)

564

Just One of Those Things

565

"...Probably no other new product in America's industrial history has received quite as much ballyhoo and attention as the Tucker. It has been subjected to Senate investigations, SEC inquiries and thousands of uncomplimentary rumors. In this writer's opinion, the entire automotive industry has rated the Tucker as just one of those things out of the comic sheets, fun to talk about but strictly a product of the 'never, never world'..."

Tom McCahill, MI Automotive Editor (August 1948)

566



Left: caption: "The Tucker's face has an extra eye, right in the center. It turns with the steering wheel."

Right: caption: "Here's the rear, quite as startling and unconventional as the front. Note the six exhausts."

567

Smiles and Guffaws

568

"...From coast to coast I have talked to automobile men and whenever the subject got around to Tucker, smiles and guffaws were always in order. I was told by men who said they had it right from the horse's mouth, that Tucker was in an engineering jam because he couldn't figure out a way to get a reverse gear into the car. I was told by other that his only car had a Mercury engine under the hood..."

Tom McCahill, MI Automotive Editor (August 1948)

569

The Green Light

570

"...Yes, I was told many other similar things and frankly, I was just as doubtful as the rest. I contacted the Tucker organization on several occasions, trying to get a true story for these pages, with no success whatsoever. Finally Mr. Parsons, director of publicity for Tucker, gave me a green light and I packed my cameras in a hurry..."

Tom McCahill, MI Automotive Editor (August 1948)

571

For the Record

572



"...The Chicago factory, which is one of the largest in the world, was a beehive of activity. For the record, here's what I saw: at least 2,000 men working on a moving production line, nearly 200 cars in various forms of completion, and the huge paint and drying enclosures running at full tilt on new bodies. To sum up, Tucker was definitely building automobiles..."

Tom McCahill, MI Automotive Editor (08/1948)

Left: caption: "Proof that Tucker is making cars: a production line"

573

According to What I Saw

574

"The first thing that strikes the eye is literally several acres of wheels, tires, body stampings, engines, frames and all the related parts that go to make up an automobile. You see hundreds of cylinder blocks, bell housings, radios, batteries and shock absorbers. I counted 58 finished car bodies in the assembly line. Work was stopped on these a week ago when the Securities and Exchange Commission moved in to investigate financing of the company..."

Phil S. Hanna, Automotive Writer - Chicago Daily News

*RE: in the summer of 1948, the SEC launched an investigation into the Tucker Corporation. One result was the closure of the Chicago plant for three weeks. During this time, Hanna went for himself to see the situation first-hand. Provisions of the "Surplus Property Act" had, as one of its provisions, the disposal of war surplus plants for the purpose of getting the plant/s back into operation and putting people back to work. Preston Tucker claimed his and his company's purpose was to do just that. In August 1948, Tom McCahill's article in praise of the Tucker car appeared in *Mechanix Illustrated*, providing public recognition by an acknowledged and respected automotive authority.*

575

"...In another bay of the big factory close by I counted 90 finished engines. There are small mountains of cartons containing smaller parts for the automobile in the receiving room, a huge stack of sheet metal and a battery of shelves half a city block long containing steel bars and rods. In the forefront of the mammoth factory, on the Cicero Ave. side, conveyors and new welding machinery, part of the assembly line, appear ready to resume operations at a moment's notice..."

Phil S. Hanna, Automotive Writer - Chicago Daily News

576

"...In another big room I saw about 30 Tucker workmen putting cars together and tuning them up. These men are working 'for free' and since the closing of the plant have assemble six cars. I talked with two of them, Eddie Offut and Dan Leabu, who told me that they were working 'for free' because they have faith in Tucker and believe the SEC investigation will prove 'political'..."

Phil S. Hanna, Automotive Writer - Chicago Daily News

577

"...One of the men took me out in a new Tucker which was just being completed. Then he took me out in a chasis equipped with Tucker's new automatic transmission. I had no stop watch to check acceleration, but from a standing start we got up to 60 miles an hour faster than I can recall having ridden before..."

Phil S. Hanna, Automotive Writer - Chicago Daily News

578

"...The car backed up rapidly. Coming and going into the plant are scores of Tucker dealers from all over the United States. I heard no disgruntled conversation. I saw the offices which the SEC claimed to have cost \$110,000. The walls are covered with imitation woodwork in wallpaper. Cost of remodeling was \$10,600 and air conditioning \$7,500, according to books shown me. The Tucker plant, according to what I saw, appears ready to start production of cars."

Phil S. Hanna, Automotive Writer - Chicago Daily News

RE: three weeks after the pant was shut down for the SEC investigation, Preston Tucker called back 300 production workers in late July 1948 and began production operations, despite the presence of the SEC in the plant. In fact, it was his goal to prove to the government his stated intentions of building automobiles and, hopefully, get them off his back so he could proceed to do so.

579

Pancake Jobs, Past and Present

580

"...Then I got a real surprise! I had my first ride in a Tucker. I was amazed at its comfort and the way it rode over bumps and railroad tracks with the ease of a cloud passing over a mountain. I took picture after picture. The engineer lifted the hood and showed me the engine - but first I had to give him my word I'd lock my camera..."

Tom McCahill, MI Automotive Editor (August 1948)

581

"...It is a six-cylinder, double-opposed, pancake job, water-cooled and not unlike a number of pancakes of the past. It is rated at 150 hp but dynamometer tests show 177..."

Tom McCahill, MI Automotive Editor (August 1948)

582



Above: caption: "Where's the engine? It's not up front, Tom discovered. It's in the rear, leaving the front free for lots of baggage." 583

This Side of the Pond

584

"...Then I drove the car! The pre-select shift worked well and the car took off like a comet. After several acceleration runs I stopped and tried the reverse gear. The Tucker does back up! Leaving the plant grounds, I went up to Cicero Boulevard on the south side of Chicago, and I soon knew I was in one of the greatest performing passenger automobiles ever built on this side of the Atlantic..."

Tom McCahill, MI Automotive Editor (August 1948)

585

Naught to 105

586

"...This car is real dynamite! I accelerate from a dead standstill to 60 miles an hour in 10 seconds. Then I saw an open stretch ahead and I opened the throttle wide. In no time at all, it seemed, we were doing 90 on the clock, 95, 100 and then 105 - miles an hour, that is! And we were still climbing when a truck loomed up ahead and I had to kill speed. This was the quickest 105 miles an hour I have ever reached. I have gone 105 before in foreign cars but none of them ever got there that soon..."

Tom McCahill, MI Automotive Editor (August 1948)

587

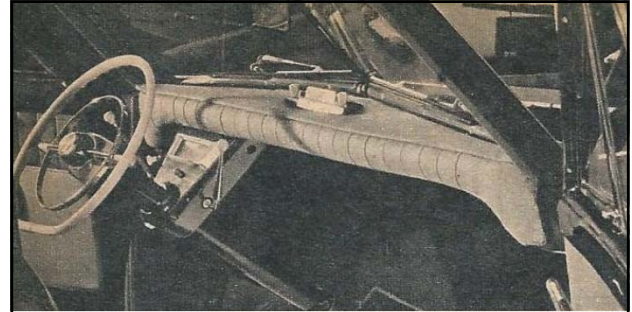
In a Class By Itself

588

"...The car is roomy and extraordinarily comfortable. It steers and handles better than any American car I have driven. As to roadability, it's in a class by itself. I'll really go out on a limb and say if this car will stand up and prove reliable, it will make every other car made in America look like Harrigan's hack with the wheels off..."

Tom McCahill, MI Automotive Editor (August 1948)

589



Above: caption: "Note special crash-safety compartment on right side. Padded dashboard has no instruments but lots of room underneath."

590

You Have My Word

591

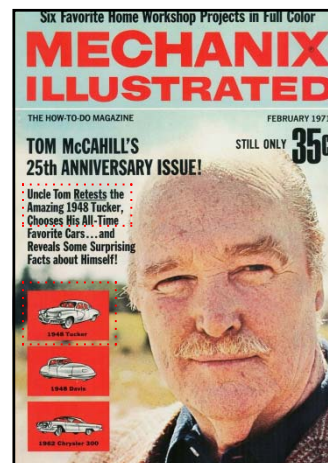
"...The car I was driving might start coming apart in 50 miles - that I don't know. But you have my word for it, when I was driving it, it was tops."

Tom McCahill, MI Automotive Editor (August 1948)

592

Now It Can Be Told


593



"I was pleased when Mr. Tom McCahill contacted me with his desire to retest the Tucker for the February, 1971 issue of Mechanix Illustrated magazine. This issue is still available and I would like to recommend to anyone interested in the Tucker to read Mr. McCahill's re-evaluation of the car after 23 years had passed..."

W.B. Hamlin, October 1972

594



**Tom McCahill
Retests the
1948 Tucker**

By Tom McCahill

"On the way to the Ontario race track in California last fall I had in my pocket W.B. Hamlin's address, which just happened also to be in Ontario. Mr. Hamlin undoubtedly rates as the No. 1 Tucker fan in the country and I understood he had several at his home in running condition. If this was true I was anxious to get behind the wheel of one again because the last time I drove a Tucker was nearly a quarter of a century ago and it started a rhubarb of gigantic proportions that never quite ended..."

Tom McCahill, MI Automotive Editor
RE: excerpt from the February 1971 issue of *Mechanix Illustrated* magazine in which appeared an article entitled *Tom McCahill Retests the 1948 Tucker* (left)

595

"...Shortly after World War II, Preston Tucker announced he was about to build the world's most unusual car that would make every other car on the road seem old hat. He was right and he was wrong. His car was right but other manufacturers could hardly be called fans of his and Tucker never correctly estimated the millions of tons of stumbling blocks that would be tossed in his path. In fact, there was some pretty good evidence that high-price sabotage had been employed to keep him from succeeding. But let's go back to the beginning, the day before I tested the Tucker..."

Tom McCahill, MI Automotive Editor (February 1971)

596

Be Careful What You Ask For

597

"...Back in '48, Tucker was in financial trouble and also was being hurt by rumors running around the Detroit scene that his car was a failure engineering wise. I was having lunch at the Dearborn Inn with a group of Ford men, which included the chief engineer and just about the entire public relations staff, when the subject of the Tucker came up. My companions asked whether I had tested it, I hadn't. There were loud guffaws and even some table thumping at the mention of the Tucker operation in Chicago. One of the PR men suggested we phone Tucker from the inn office and ask him when I could test his car. No writer had ever driven the Tucker, much less tested one..."

Tom McCahill, MI Automotive Editor (February 1971)

598

"...Lunch over, we all headed for the phone and placed a call to Tucker at the factory. In a couple of minutes Tucker himself was on the phone and I guess I may have stuttered a bit as I told him, 'Mr. Tucker, I'd like to test one of your new cars for MI as soon as possible.' His answer was pleasant and simple: 'Any time you want.' This threw me into a momentary tailspin and the Ford men in the room were aghast. 'How about tomorrow?' I suggested. He said, 'What time?' 'Right after lunch,' I said. And that's how I became the first writer to test a Tucker. Unknown to him, Mr. Ford picked up the phone bill. To say everyone in the room was shocked would be the understatement of the century because all the talk at lunch had been about how he'd never get one running and that this was the stock promotion of all time..."

Tom McCahill, MI Automotive Editor (February 1971)

599

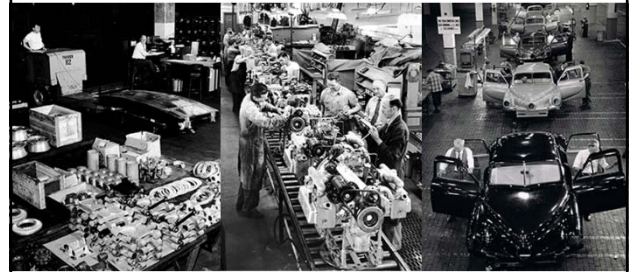
20/20 Hindsight

600

"...According to the rumors running around Detroit there was no assembly line, paint shop or even assemblers working in the huge former B-29 factory that Tucker had rented for his operation. and I'd be lucky if I could find a watch man. I have no idea who paid the saboteurs or who was feeding the rumor mills back in Detroit. When I arrived in Chicago the activities I ran into showed in an eyeblink that whoever was paying to sink Tucker wasn't succeeding. Looking back, it's too bad the saboteurs found out how inefficient they were because, possibly based on my reports, big money started to pour in to sink the Tucker and I became one of the victims as well..."

Tom McCahill, MI Automotive Editor (February 1971)

601



602

Yellow Journalism (?)

603

"...Until my report came out, in addition to what I made at MI, I was getting a retainer from the biggest digest magazine of all time - none other than the Reader's Digest. After my favorable report on the car I was told that I had been taken in by Tucker and, therefore, my services would no longer be needed. Less than a week after this the No. 2 weekly magazine at the time (Collier's) had a scathing piece on the Tucker that said there weren't any cars that would run - oh, they might run but they didn't have a reverse - and many other things, all bad. The next month this report ran in the digest magazine (which had first placed it in the weekly magazine) and, though it didn't help my bank account, both were later sued...and lost. However, by then the dirty work had been done. Those two major American publications had, in my opinion, a major part in sinking Tucker forever in spite of the fact that the Tucker was, as I tested it, the finest American car ever built until that date..."

Tom McCahill, MI Automotive Editor (February 1971)

604

"Preston Tucker, former president of the Tucker corporation, filed suit in Superior court yesterday asking five million dollars damages from Reader's Digest Association, Inc. The suit alleges he was libeled by an article appearing in the September, 1949 issue. This was a condensation of an article appearing in Colliers magazine June 25, 1949. Tucker also has a libel suit pending against Colliers..."

Chicago Tribune, August 10, 1950

605

Driving is Believing

606

"...Twenty-three years ago when I arrived at the Tucker factory I not only found the production line and paint shop working but was given the choice of six cars to test. They were all powered by Franklin engines, which was a common engine of light aircraft in those days. In planes these engines were air-cooled but, for Tucker use, they were converted to liquid cooling. They were rated at 150 hp, though the dynamometer tests showed they averaged out at 177. After selecting a car, I made many acceleration runs at the plant grounds and after getting a speedometer correction, found that I was averaging 0 to 60 in 10 sec., which was phenomenal 20-plus years ago. Incidentally, one of the first things I tested was the reverse gear and I used all six Tuckers for this. All six backed up without any fuss whatsoever, thus blowing another Detroit rumor in the head. I then left the plant grounds and went out on Cicero Boulevard on the South Side of Chicago..."

Tom McCahill, MI Automotive Editor (February 1971)

607

"...The results? Well, I'll quote from our test in the August 1948 issue of this magazine (it's still my mostoften-quoted report): 'Once outside the plant and on the road I knew I was in one of the greatest performing passenger automobiles ever built on this side of the Atlantic. I saw an open stretch ahead and I opened the throttle wide. In no time at all, it seemed, we were doing 90 on the clock, 95, 100 and then 105 mph. And we were still climbing when a truck loomed up ahead and I had to kill speed'..."

Tom McCahill, MI Automotive Editor (February 1971)

608

Then and Now

609



"...To find out how the Tucker performs today, 20 years later, I headed for Mr. Hamlin's place to take a look at his collection. As it turned out, it was less than 2 miles from my motel, and cruising the block with Brooks, I saw three Tuckers in front of the garage where Mr. Hamlin was working. Unfortunately, the better of the three mechanically, according to Mr. Hamlin, was his Serial No. 2 car but the paint and finish were in poor shape and it wouldn't be ready for another week or so, looks-wise. I settled for car No. 14 because it looked like it was fresh from the showroom floor and was finished in a blue metallic paint, identical to the car I had tested many years before..."

Tom McCahill, MI Automotive Editor (February 1971)

610

"...Mr. Hamlin knows the history of just about every Tucker ever made and knows where most of them are today. Actually, there were 49 completed cars sold and the 50th car was assembled from parts after the plant was sold at auction. Many of these cars now are in museums ranging all the way from Florida to California but a few still are in private hands. Two were known to have been wrecked and there are rumors that there is one car in a museum in Brazil, another in Mexico City and the possibility of a third wrecked somewhere in Maryland..."

Tom McCahill, MI Automotive Editor (February 1971)

611

Knowing Tom

612



"...I have always respected the integrity of Tom McCahill. In today's world of disappointing men with 'feet of clay' and cynics such disillusionment breeds, I have had the rare privilege, for me at least, of knowing Tom - a critic automobile enthusiasts can read with abiding faith."

W.B. Hamlin, October 1972

613

Tearing Up Greatness

614



"...Well, we found Mr. Hamlin's little beauty (and this car has better than 150,000 miles on it) will still do 0 to 60 in 10 sec. flat and will zip by 100 as quickly as the car I drove years before. As far as Mr. Hamlin was concerned it was okay if we made a flat-out run on the Ontario Speedway but your Uncle Tom took the freeway instead and called a halt at around 105. With a car this old, not to mention with this many miles on it, a flat-out run, even for a few seconds, might be all that would be needed to cause something to blow. I'm not the kind that enjoys tearing up greatness..."

Tom McCahill, MI Automotive Editor (February 1971)

Above L&R: caption: "Tom talks with Tucker owner W.B. Hamlin, left, who's kept his 23-year-old car in showroom condition. This rear-engine rig features an extra eye that moves with the steering wheel and has six exhausts, Right."

615

For Shame

616

"...It can be argued, with considerable logic and rather convincing evidence, that the government delayed progress in the automotive design at least ten years when it put Tucker out of business in 1948. If Tucker had continued, the industry would have had to move with him and the public wouldn't have waited this long for all aluminum engines, and at least a gesture toward economy of operation..."

RE: excerpt from *The Indomitable Tin Goose* by Charles T. Pearson

617



"Though Preston Tucker and many of the original crew have long since passed on, they once built the most advanced automobile in the world, and somewhere, in Detroit, a group in villain suits with loaded pockets ran these cars into the ground. For shame."

Tom McCahill, MI Automotive Editor (February 1971)

618

Part 6

Ask the Man Who Owns One

619

A Flash-in-the Pan (?)

620



"Was the 1948 Tucker the dream car its inventor-promoter claimed it was? Or was the Tucker another flash-in-the-pan dream car that would never have fulfilled all the promises made for it? Perhaps the question can never be completely answered - time has silenced most of the cars' critics - as well as its founder. But the aura surrounding the controversial car has not dimmed. When one appears on the road it never fails to turn heads, even when other motorists don't know what kind of a car it is..."

621

CAR CLASSICS, October 1972



622

"...In this major feature article, William B. Hamlin gives his point of view of the infamous or if you prefer, famous Tucker Torpedo. Hamlin's credentials for this job are impressive. For one thing he has owned a Tucker since 1952. It was the first one he could get his hands on since his order place for Tucker No. 14 was never filled. The car he bought had over 70,000 and cost as much as a new Oldsmobile would have at the time!..."

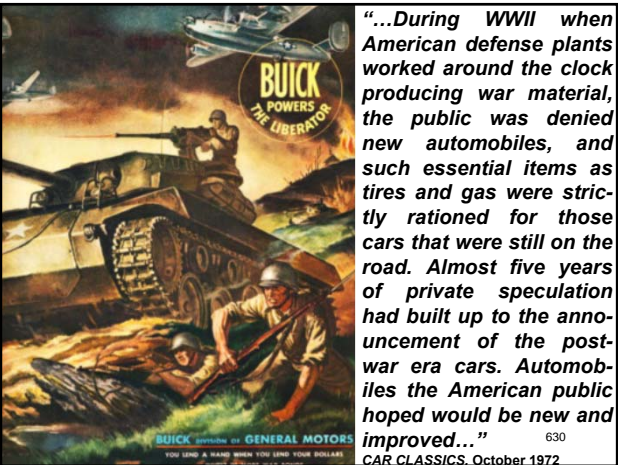
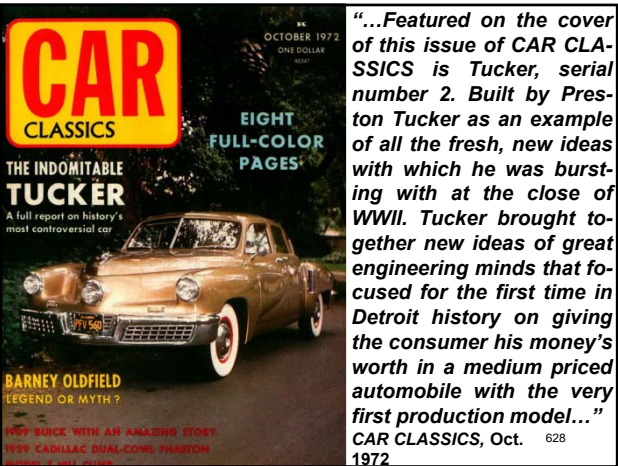
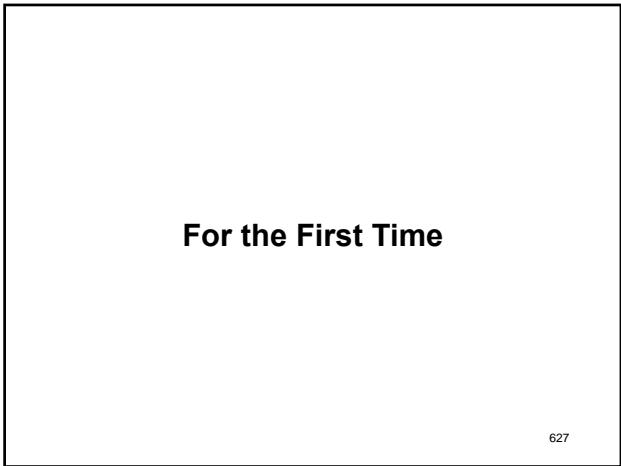
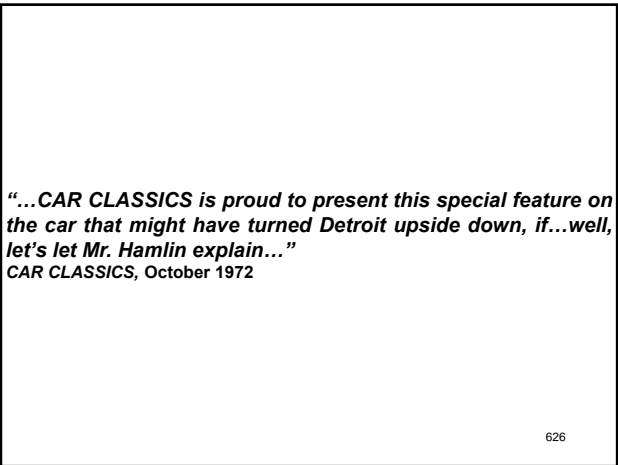
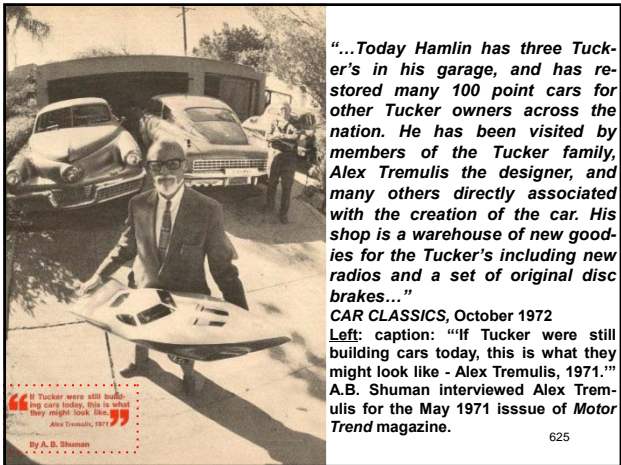
CAR CLASSICS, October 1972

623




Above: caption: "Author's Tucker - One of three Tuckers currently owned by the author, this one has more than 200,000 miles on it without a major overhaul or extensive repairs"

624



"Smoke gets in their Eyes!"




"We have a job to do...the biggest job that has ever faced the minds and muscle of American industry. This is the time for our workers to prove we have earned our reputation as the worlds masters of mass production. This is the time for the genius of our industrial scientists and engineers to preserve their gift to America, the worlds highest standard of living. And preserve they will, gloriously and decisively. Production, in the American way, is the key to victory."

Above: copy and illustration (by Rube Goldberg) from a 1942 Philco ad. By 1943, "More, Better, Sooner" was the war cry of Detroit's soldiers of production. War unleashed and mobilized the powerful energy of American production, providing full employment for the duration of the war.

631

MY TOMORROW...




"The tick of the clock in the hall...
The beat of the drum, both steady...
A day's work and a day's rest...
The hand of a clock on my cheek...
They're all in my dream of tomorrow...
The wheel in my hands and the air...
The road and the beat and the dog...
By my side and the laughter and joy...
Of being alive...
The song of a motor and the feel of a...
most successful, most advanced...
the new Nash...
And we will build these cars in num-
bers three times greater than in our
1941 peak. In this way, Nash will help contribute the jobs, the opportunities, the futures which will insure the strong, vital and growing America all of us owe to those who have fought to preserve it."

RE: excerpts from ca. 1945 Nash ad (left). By 1945, with the end of the war in sight, corporate America promised returning vets the good life (via consumer goods, like automobiles)

632

1946 FORD



"...Instead, when production resumed in the major automobile plants, what emerged was chrome covered duplicates of the 1941-42 models. Even at that, people were so hungry for a new car, they were willing to wait in line for Detroit's rehashed pre-war models..."


CAR CLASSICS, October 1972

Above: 1942 Ford ad
Left: 1946 Ford ad

633

Much More Than a Dream


634



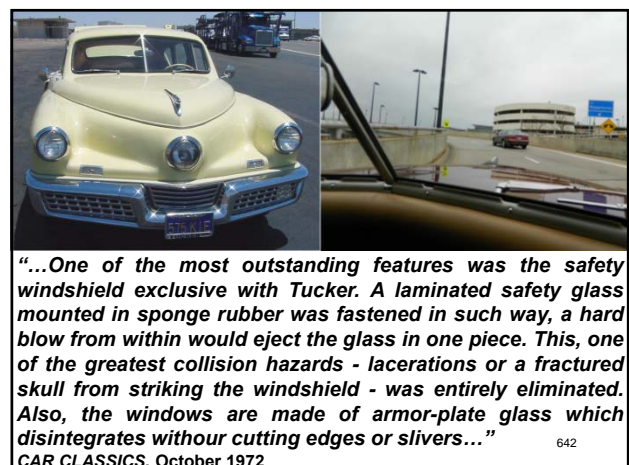
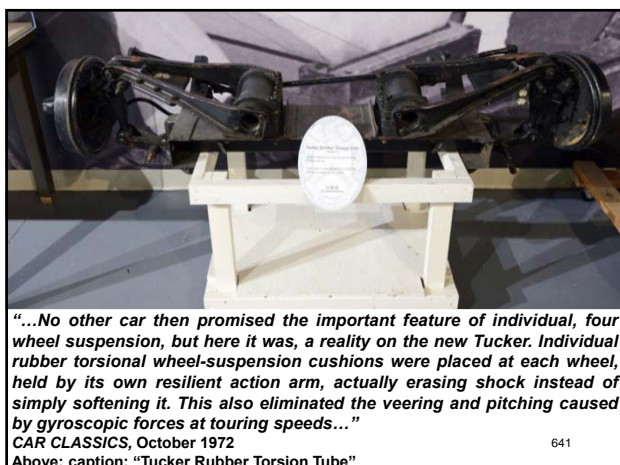
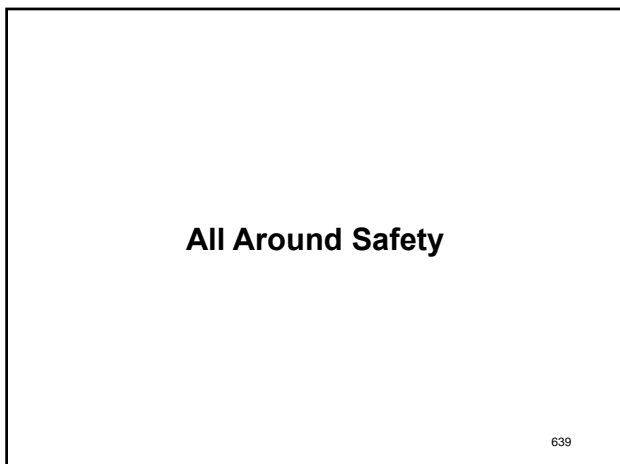
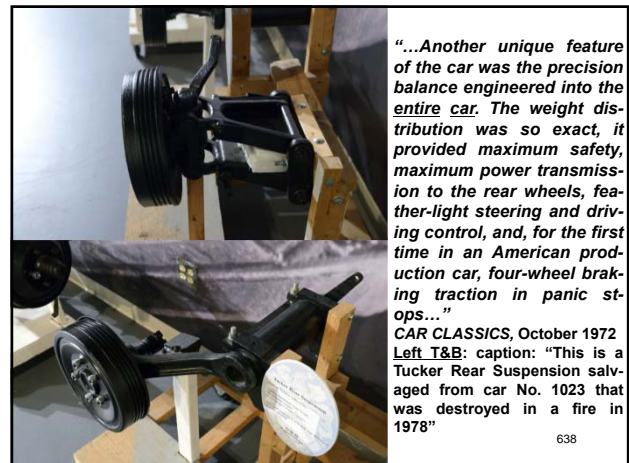
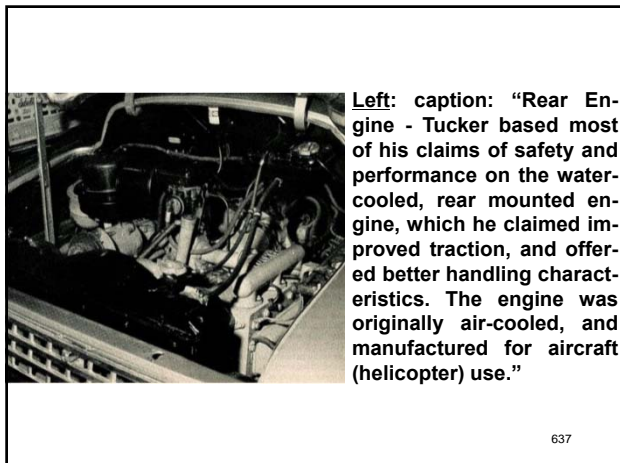
"...Then came Preston Tucker. Engineered with safety the number one consideration, the Tucker Torpedo was a dream car - and much more than a dream car. Revolutionary in design, it featured a rear engine of 166-horse power, flat opposed six cylinders, located below the level of the passengers. Because of the improved design and extensive aluminum alloy construction of the engine, the motor produced more power for the cars' weight than any contemporary volume production automobile engine of the time. Placing the engine in the rear also eliminated fumes, heat and noise in the passenger compartment..."

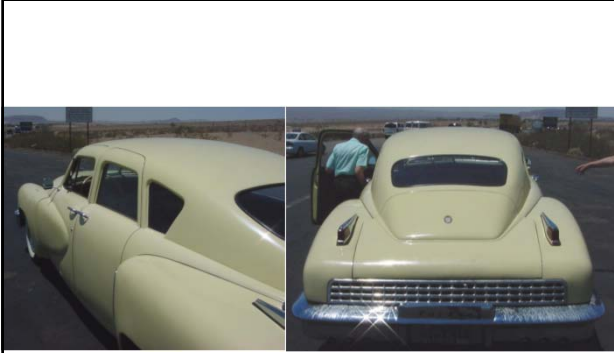
CAR CLASSICS, Oct. 1972

635



636





643



"...Still another safety feature were the steel bulkheads surrounding the luggage compartment located under the hood. These bulkheads shielded the passenger compartment from head-on collisions far more effectively than the conventional front engine construction. Also, a second steel safety bulkhead walls off and protects the rear engine and passengers from rear end collisions..."

CAR CLASSICS, October 1972

644

Above L&R: safety bulkheads (highlighted) in hood (left) and trunk (right)



645



646



"...Probably one of the most novel features of the fabulous Tucker is the Cyclops Eye headlamp. In addition to the regular fixed headlamps in each fender, there is a center cyclops eye which turns with the front wheels. Driving on mountain roads, making sharp turns into driveways, etc. this added illumination is a special advantage. This third headlight does not burn when the wheels are straight ahead, so it doesn't create a driving hazard for other drivers. This 360-degree lighting concept includes the tail lights which are placed on the fenders to give full visibility from the sides and rear of the car. No superfluous position lights were needed..."

647

CAR CLASSICS, October 1972



648

A Destiny Fulfilled

649

NOW! TODAY!
you can see
the **NEW**
TUCKER
AUTOMOBILE
on display until 10 o'clock tonight.
(Last day of display)
Don't miss seeing it at . . .

UNIVERSAL TUCKER MOTORS
730 Francisco Blvd. San Rafael 6549-M

REPAIR ALL MAKES OF CARS AND TRUCKS
Our MECHANICS are all EXPERTS with 20 or more years of experience in automobile repair work.

Complete Body and Fender Painting Dept.
ALL OUR WORK IS GUARANTEED
Free Pickup and Delivery Service


"...In 1952, I was fortunate enough to become the proud owner of a Tucker, serial number 14. Life, for me, has not been the same since. Naturally, I had a new Tucker on order, but one was never delivered. Ironically, my order at the dealer was to be number 14!..."

CAR CLASSICS, October 1972

650

Missed Opportunity

651



"...the most tragic aspect of the destruction of this particular automobile's future was the loss to the American motoring public of millions of safe miles on the nation's highways. The unique and important safety features of the Tucker...which are not, unbelievable as it sounds, used on any automobile produced today, would have saved uncountable lives and prevented thousands of injuries that have resulted from traffic accidents in conventional cars..."

CAR CLASSICS, Oct. 1972

652



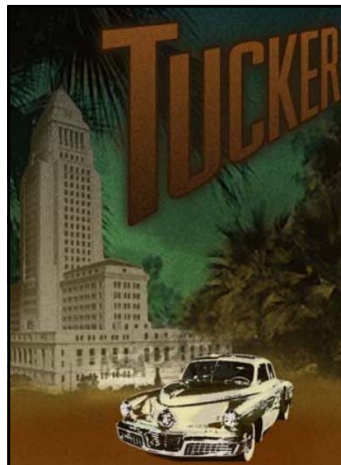
"...The patented Tucker safety frame surrounded the passenger compartment giving every passenger in the car vital protection against injury in case of collision from any direction. This protection was also increased by the fact the frame was tapered at the front and the rear like the prow of a ship. Thus, a slanting blow - as in 90% of all collisions - is deflected sideways with minimum damage..."

CAR CLASSICS, October 1972

Left: caption: "Tucker No. 1018 chassis"

Right: caption: "Tucker chassis on display at the AACA museum"

653



"...With highway accidents killing and injuring more innocent Americans than all wars, safety of our automobiles cannot be stressed too much. This is why I feel the demise of the Tucker was a serious loss to Americans. Mass production was to make these remarkably safe automobiles available to everyone in the medium priced market..."

CAR CLASSICS, October 1972

654

Eye Appeal

655



"...Even though the Tucker was engineered for more safe miles than any other car in Detroit history, it was not an ugly looking automobile. Though the ultimate eye appeal of any vehicle rests with the tastes of the beholder, there are certain standards of beauty expected in a car. The Tucker's lines and form has been appealing to at least 95% of all the thousands who have examined one of mine..."

656

CAR CLASSICS, October 1972



657



658



"...Alex Tremulis, designer of the Tucker, told me 'eye appeal' was deliberately sought after and much effort evolved to produce what some feel is the most exquisite blend of curves, sculptured sheet metal in post-war automobile history..."

659

CAR CLASSICS, October 1972



660



661

What a Combination!

662



663



664



665

Lebensraum

666



"...It is by far the most comfortable automobile I have had an opportunity to ride in. The head room is remarkable. This is due to another exclusive Tucker feature, roof top doors. All four doors are curved at the top; opening well into the roof itself giving ample room for entering or exiting the car. There is no need for a passenger to jack-knife his body, or bend and twist like an eel to enter the car..."

667

CAR CLASSICS, October 1972



"...In spite of this unbelievable roominess inside the car, it is only five feet from road to roof. This low profile is accomplished by a step down floor only nine inches above the pavement, which still affords greater road clearance than comparable 1972 cars, 24 years since the last tucker rolled off the assembly line..."

668

CAR CLASSICS, October 1972



669



"...No car built before or since has given in a standard sedan concept as much passenger room. The rear seat is 64-inches wide, ample room for four people in complete comfort. Uniquely, the front seat is just as wide as the rear...a full 64-inches. This means the front seat cushion and rear seat cushion are interchangeable..."

CAR CLASSICS, October 1972

670



671



672



673



674

Promise Kept

675

SPECIFICATIONS
1948 Tucker Model 48 4-door sedan
Factory prototype No. 211

Price when new: \$12,400

Options: Radio, heater, whitewalls.

ENGINE
Type: Overhead valve-injection 4-cylinder aluminum block, cast-iron head, valve overhead.
Displacement: 222.7 cu. in.
Bore & stroke: 4.00 x 3.00 in.
RPM: 198 @ 3000
Max. torque @ 2000: 222.7 lb.-ft.
Compression ratio: 7.0:1
Fuel system: 2-bar carburetor, aluminum carburetor, fuel pump.
Exhaust system: Two mufflers, one for each bank, 8 exhaust pipes.
Electrical system: 6-volt battery/alternator.

CLUTCH
Type: Single-plate, dry disc, molded aluminum.
Diameter: 10.5 in.
Weight: 100 lb.
Transmission: 4-speed manual with Bendis vacuum-actuated shifter.

RADES
Type: 4-wheel hydraulic discs, internal expanding.
Disc diameter: 11.0 in.
Total disc area: 36.4 sq. in.

CHASSIS & BODY
Frame: Box-section steel, central perimeter with side rails front & rear.
Body construction: All-steel, floor-to-rafters frame, side rails, 4-in. B-pillars, 4-in. C-pillars.
Body style: 4-door sedan.

SUSPENSION
Front: Independent, upper & lower control arms, coil springs, shock absorbers, rubber bushings.
Rear: Independent, upper & lower control arms, coil springs, shock absorbers, rubber bushings.
Tires: 7.00 x 15 tube-type whitewalls.
Wheels: Pressed steel, disc center, rim, lug bolted in hub flange.

WEIGHTS & MEASURES
Wheelbase: 100.0 in.
Overall length: 210.0 in.
Overall width: 60.0 in.
Overall height: 70.0 in.
Front overhang: 34.0 in.
Rear overhang: 40.0 in.
Curb weight: 4300 lb.

CAPACITIES
Cooling system: 24 qt.
Fuel tank: 25 gal.
Fuel consumption: 18 mpg.
Average: 18-19 mpg.

PERFORMANCE
Top speed: 110 mph.
0-60 mph: 10.0 sec.
0-100 mph: 17.0 sec.

STEERING
Type: Worm & sector.
Turn lock to lock: 3.2.
Rack: 14.0:1 ratio.
Turn circle: 30.0 ft.

“...Happily, I have owned several of these magnificent machines. Through the years I have restored to new condition many more, so it is with this experience I can personally vouch for every aspect of the engineering innovations promised in 1948...”

CAR CLASSICS, October 1972

Left: caption: “Specifications - 1948 Tucker Model 48 4-door sedan (Factory prototype No. 21)”

676

Keeping an Even Keel

677

“...With over 200,000 miles on my first Tucker, it is as responsive as ever, and effortless to handle, the quick steering (3.2 L/L) feels like power-steering yet isn't. The front end uses 'live' bearings instead of normal 'bushings' and the spindles rotate instead of dead spindles as in conventional systems. The result of this type of front end is the absence of the nuisance of oil leaks, replacement hoses, pumps and packings etc., as with other car's 'power steering'...”

CAR CLASSICS, October 1972

678

"...The steering is quite different in another respect. The wheels are 'deep-dished,' putting king pins in the center of the tire tread so pull is equal on each side of the king pin should a tire go flat, eliminating the steering wheel fight at the source..."

CAR CLASSICS, October 1972

679

Days of Thunder

680



Above: caption: "Early stock car racing." In the years immediately following WWII, stock car racing was experiencing the greatest popularity it had ever seen. Tracks throughout the country were drawing more drivers and bigger crowds. Nonetheless, there was a serious lack of organization. From track-to-track, rules were different. Some tracks were makeshift facilities, producing one big show at a county fair or something similar to capitalize on the crowds flocking to the events. Other tracks were more suited to handle the cars, but not the crowds. Some could manage both, but did little to adhere to rules set by other tracks.

681



"...In 1954, six years after the car was first introduced to the American public, I put my Tucker through its paces at the Los Angeles County Fairgrounds at an official event for stock cars of that year. These were competing in drag races, and the track record at the time was 78.8 mph in the quarter-mile. This record was set by a new Olds '88' with a V-8 engine..."

CAR CLASSICS, October 1972

Above: caption: "Cobra vs. Corvette - Los Angeles County Fairgrounds 1966"

682

"...Because of the fantastic traction, and the torque of the Franklin engine in the Tucker, I decided to exercise caution and start from the standing position in second gear rather than risk tearing out a rear end. Naturally, the Olds shot out several car lengths ahead, but instantly, as the Tucker 'got it together,' in what was later described by onlookers as a blue flash, the six-year-old Tucker overtook the Olds and finished well in the lead. Not only did the Tucker break the track record by doing 82 mph in the quarter mile that day but amazed everyone by stopping in two-thirds of the distance required by other cars. This remarkable feat was accomplished by a six year old car with over 110,000 miles on its speedometer..."

CAR CLASSICS, October 1972

683



684

"...Shortly after this experience, I found an interesting test for the Tucker. Locally, a new Cadillac was placed on a Dynamometer and registered 87 road-horsepower at 2,000 rpm. At the time, 90 road-horsepower had been the highest output on any stock car. The Tucker was then set up on the Dynamometer and the operator was amazed to see the needle pass the highest reading; 103 road-horsepower in high gear at 2,000 rpm. This was the same Tucker with over 110,000 miles!..."

CAR CLASSICS, October 1972

685

Over-Square

686

"...The engine itself is a remarkable energy machine. The Franklin engine was built for Tucker at the Air Cooled Motors plant in Liverpool, N.Y. near Syracuse. This plant was tooled to deliver 150 engines per week. All engines delivered came off the assembly line complete with accessories, tested and ready for installation..."

CAR CLASSICS, October 1972

687



"...A modified helicopter engine, this particular Franklin six-cylinder horizontally opposed power-plant was the newest engine introduced in an automobile in many years. The over-square 4-1/2" bore by 3-1/2" stroke engine is extremely light-weight at 320 pounds yet had a 335 cubic-inch displacement and developed 372 foot-pounds of torque..."

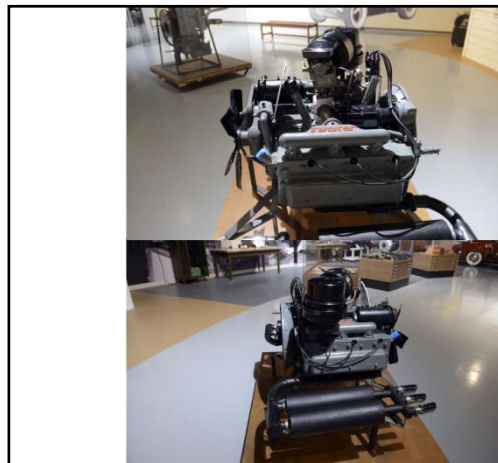
CAR CLASSICS, October 1972

688

"...The 'over-square' light-weight engine also features a Mercury-filled ring on the aft-end of the crank-shaft for dampening any vibrations. This is the only 'counter-balance' used. The crank-shaft weighs 35 lbs. and is made of forged steel. The 'throws' are 180-degrees opposed from each side, not paired together as in a V-8 engine. Connecting rod bearings can be replaced without even draining the oil in the engine due to an access plate just below the carburetor..."

CAR CLASSICS, October 1972

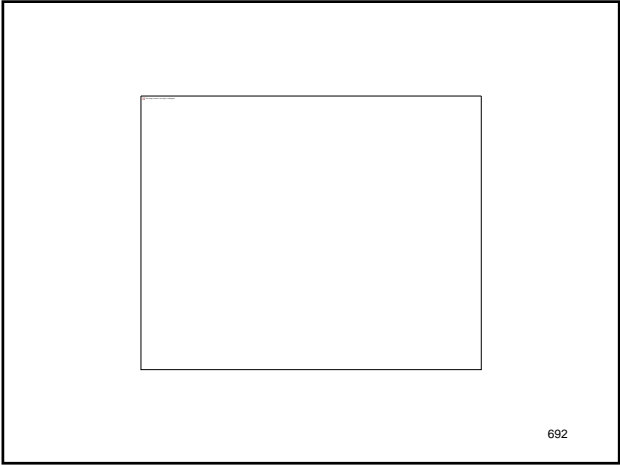
689



690

	<p><i>"...These Franklin engines were designed also for quick engine change and the plan was for complete engine change in 45 minutes. I have owned a Tucker for twenty-years and have never needed a new engine, which shows the aircraft quality and long-life built into the Tucker..."</i></p> <p>CAR CLASSICS, October 1972</p>

691




692

<p>Trans-Axle</p>	
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693

<p><i>"...There were two types of transmissions used on the Tucker cars, but the type used on the later cars was to be standard. The first transmission used was a modified Cord trans-axle. These were the only trans-axes available at the time of first production. Later an improved trans-axle transmission was developed and produced at the Tucker plant; 'Ypsilanti Machine Tool Company,' at Ypsilanti, Michigan'..."</i></p> <p>CAR CLASSICS, October 1972</p>
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694

	<p><i>"...This Y-1 transmission is all-synchro and has an exceptionally quiet first gear. All shifts are smooth and quick. Both of these transmissions have electric pre-select shifting and are effortless and simple; superior in many ways to an automatic transmission, since the driver controls the transmission, not vice-versa..."</i></p> <p>CAR CLASSICS, October 1972</p>

695


<p>The Tuckermatic R-1-2 automatic transmission was the second of three different versions of the Tuckermatic made and the only one installed on any of the production cars (on Nos. 1026 and 1042 only). Because the two torque converters on the Tuckermatic R-1-2 made the engine/transmission unit longer, the fuel tank had to be moved from behind the rear seat to in front of the dashboard for all Tuckers from car No. 1026 forward (despite the fact that only two of them actually had the Tuckermatic R-1-2 installed). This had the added advantage of</p>

696



Above: caption: "Considered by many to be the most valuable production Tucker, No. 1026 is the only remaining complete Tucker with an automatic transmission" 697

On Demand

698

"...Though the engine and chasis are most important and were given the best of thought and effort, lesser components were also outstanding in their newness of idea and approach. One of these is the car heater. Obviously well thought out, it is the only car heater I know of that can be turned on without starting the engine..."

CAR CLASSICS, October 1972

699

"...This heater was built for the Tucker car by Motorola. Built with its own fuel-pump (electric) and started by a left turn of the ignition key, the Tucker heater will fire in seconds. Located under the front seat, the heater pulls air from under the car and exhausts it the same way. The 'interior air' is blown across a large aluminum drum with fins which entailed no gaskets and possible fume leakage. There is also an option to direct the heated air through the defrost system which gives a more than ample supply of ventilation across the entire windshield are at once. This eliminates 'spot defrosting' and the resultant limited visibility..."

CAR CLASSICS, October 1972

700

Drizzle-Free

701

"...Many other innovations on the Tucker have been revealed to me in daily use. I have noticed in the rain the windshield and rear window stay clean and drizzle free at a road speed of 50 mph. The front of the car's design tends to separate moisture into two rooster tails, from the inboard of the fenders and they miss the sides of the car. It seems odd to drive in traffic and watch other drivers using their wipers while the Tucker's glass is clear!..."

CAR CLASSICS, October 1972

702

Wrap-Around Protection

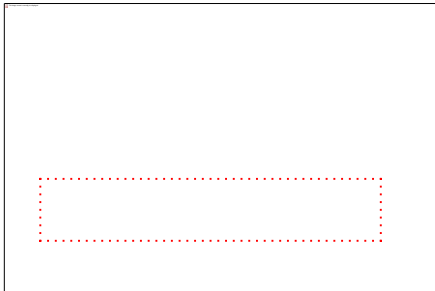
703



"...Neither are the bumpers mere 'trim-strips' indicating where the car ends! Massive in fact, these bumpers are designed for the optimum is protection to the front and rear and also to the sides due to 'wrap-around' design. The bumpers are supported by spring steel brackets and the all-around frame gives them extra backing and strength..."

704

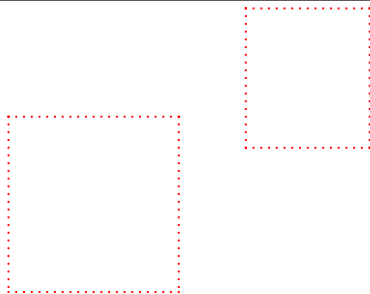
CAR CLASSICS, October 1972



705

A Body in Motion

706



"...Tucker's braking system was another surprise for me. Because of the weight-ratio creating a perfect balance, sudden stops are smooth - absolutely no lurching or nosedive. The Tucker pulls down at the rear giving a completely different sensation as you stop. A passenger's back pushes into the seat instead of of being thrown forward..."

707

CAR CLASSICS, October 1972

"...The Weight of the Tucker car is 2,600 lbs. on rear wheels and 1,635 lbs. on the front wheels. Because of this there is a 50-50 division of the weight during sudden stops. All of the brakes are the same size and the wear is even on front and the rear. There is no re-lining of the front brakes twice to the rear's once..."

CAR CLASSICS, October 1972

708

Three Wheelin'

709

In 1941, successful car salesman *Glenn Gordon Davis* saw the "Californian" (a *Ford V-8 "60"* powered three wheeler designed by race car builder *Frank Kurtis* for millionaire sportsman *Joel Thorne*). He was so impressed that he acquired the three-wheeler (in 1945) and was inspired to design and produce a larger version, joining the ranks of niche auto manufacturers such as *Keller, King Midget, Playboy* and *Crosley* in the booming post-WWII car market. Between 1947 and 1949, 17 of these unconventional passenger coupes were built. He called his three-wheeled oddity the "Divan Sedan."

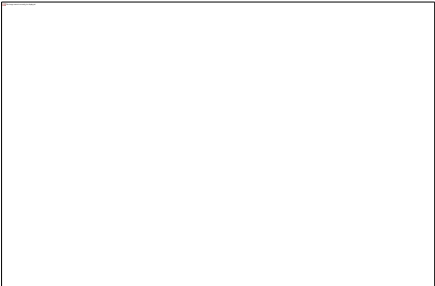
710

"If you should want to go around in circles, the new three-wheel Davis car can spin you around in a 13-foot radius at a good clip. What's more to the point, this ability to make sharp turns is mighty handy when snaking through traffic and squeezing into tight parking spaces..."

Popular Science, Jan. 1948

Left: caption: "A foursome fits cozily in the 64-inch wide seat. Nose wheel is set 2-degrees off vertical to give a better road grip. Engine is 4-cylinder, 60 hp."

711




712

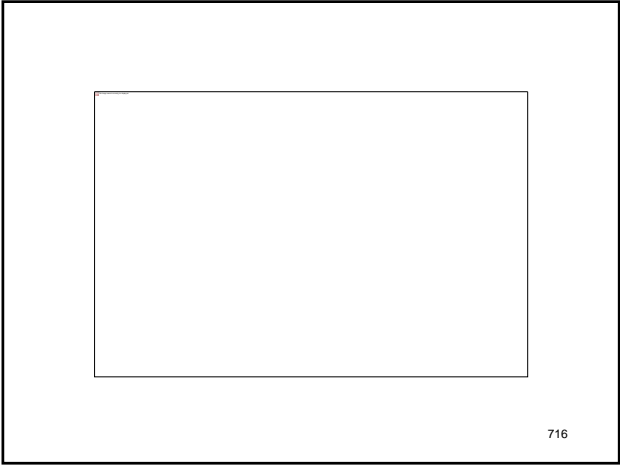
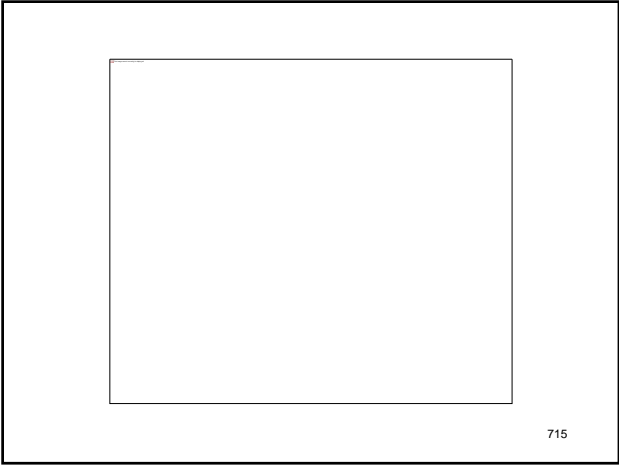
"...A low center of gravity, only 18 inches above the ground, plus a single nose wheel that turns 45-degrees explain the car's unusual maneuverability. Not only handy in traffic, it is fast on the open road - the Hercules engine zipping it along at more than 100 miles an hour. Four-point coil-spring suspension and hydraulic oleo shock absorbers make for a smooth ride even at high speeds. The cantilever top, supported entirely from the rear, is made of reinforced aluminum..."

Popular Science, January 1948

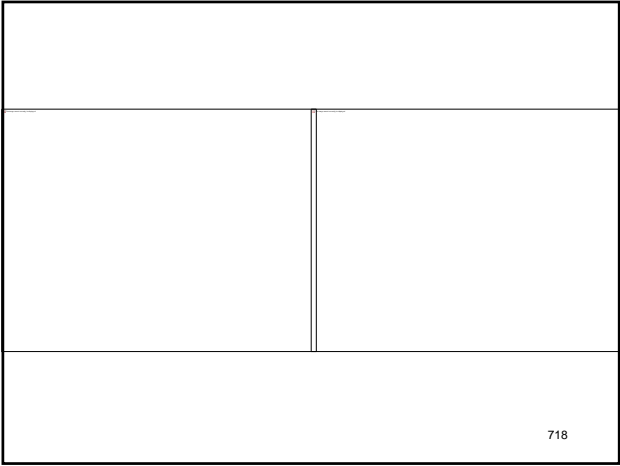
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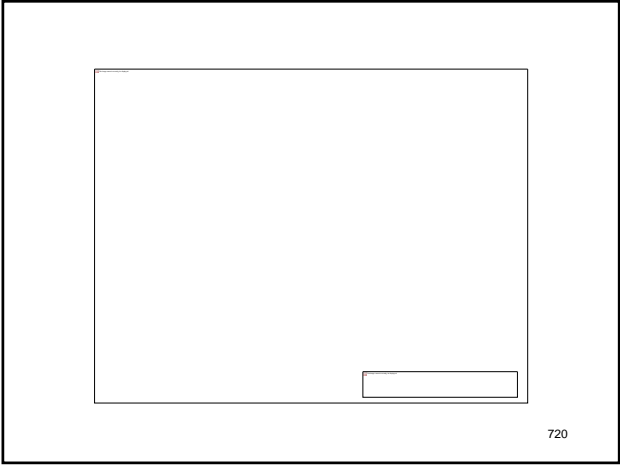
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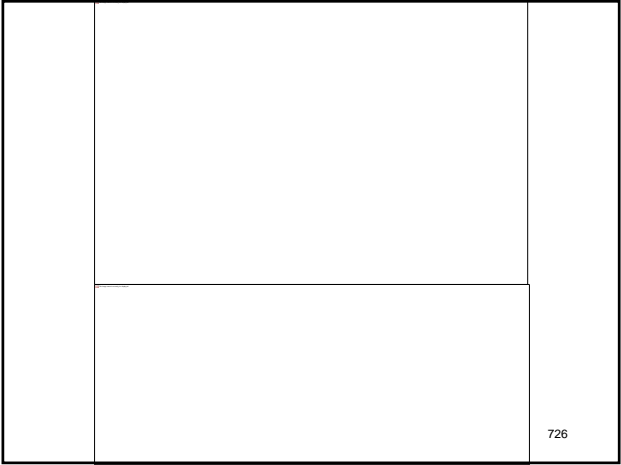
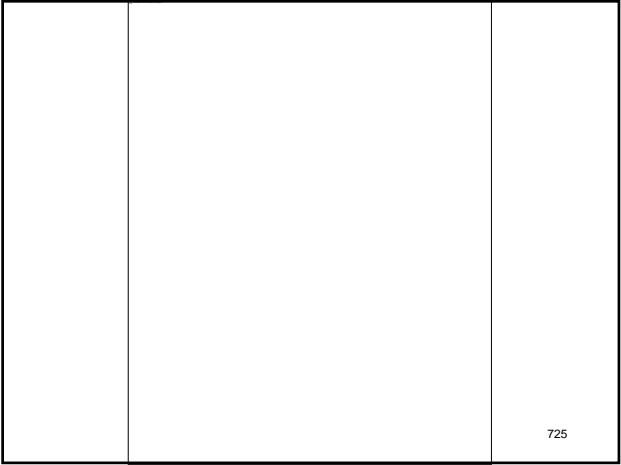
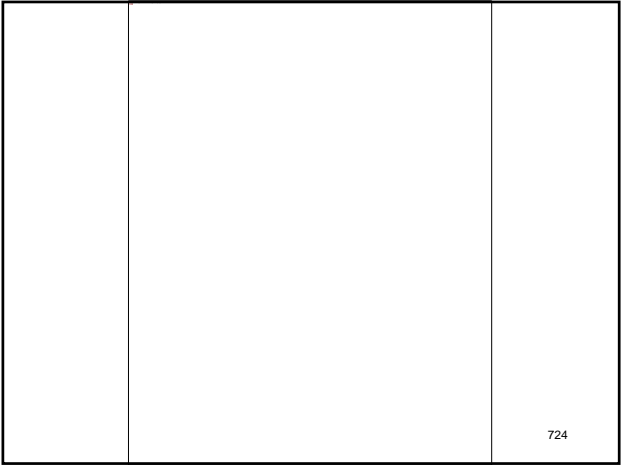
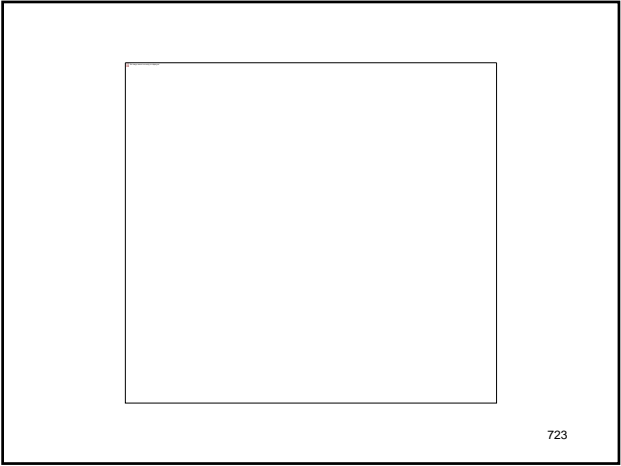
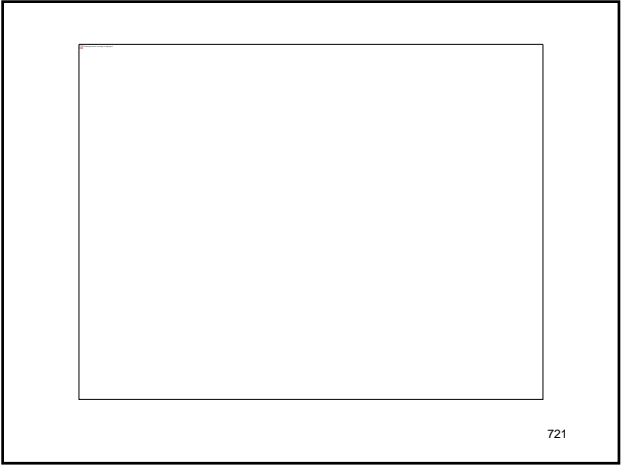


	<p><i>"...Although the car is not in full production, Gary Davis, of Los Angeles, hopes to set up low-cost assembly lines in key cities and sell it for less than \$1,000."</i></p> <p><i>Popular Science</i>, January 1948</p> <p><u>Above:</u> caption: "The Davis Motorcar Company was located in a rural section of Van Nuys, CA"</p> <p><u>Left:</u> caption: "The Davis Divan, as featured in <i>LIFE</i> Magazine"</p> <p>717</p>
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	<p>The prototype was powered by a front-mounted 47 hp <i>Hercules</i> flathead 4-cylinder engine coupled to a <i>Borg-Warner</i> 3-speed transmission. Its aerodynamic shape and lightweight aluminum body have credence to claims of 35 to 50 mpg and a top speed of nearly 100 mph (in the original sales literature). Other unusual features included retractable headlights and built-in jacks at each wheel employing military surplus hydraulic cylinders. Davis' design rivaled that of <i>Preston Tucker</i> for "Outside-the-Box" thinking. What he also shared with Tucker were legal troubles that eventually brought his fledgling company down. But while <i>Preston Tucker</i> was cleared of all charges, Davis was convicted of 20 counts of theft and served a jail term.</p> <p>719</p>
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A Crying Need

727

"There has been a crying need for an efficient motor car. A car that is not, in the language of engineers, 'over designed.' It has been the aim of all automotive engineers to balance power and weight to achieve maximum operating efficiency without impairing the quality of the ride. The American public - in fact, the world - long has awaited such a motor car. The Davis, I believe, is that car. More than four and a half years of extensive engineering, grueling tests, exhaustive research and many models have produced this 3-wheeled car. It offers greater maneuverability and safety - yet we have reduced the number of moving parts. Aerodynamic styling and aluminum provide a body so efficient that the power to propel it has been reduced from that of our prototypes. The Hercules 4-cylinder, 60 horsepower engine dramatizes the economy of the Davis by delivering 35 to 50 miles per gallon and a top speed in excess of 100 miles per hour. This would be impossible if every phase of our engineering were not perfectly coordinated. Just as in aircraft engineering, the functional demands dictated the design - so it is in the Davis. It has great speed, great power, quick getaway, a wonderful ride, safer braking, room for four, is distinctively beautiful, and yet it is the lowest priced, full-sized car."

Gary Davis728

Only the Best Will Do

729

*Preston Tucker and Gary Davis had something else in common besides namesake automobiles and legal troubles. Both Tucker and Davis wanted their radical new cars to be equipped with the best brakes available, so they turned to a small manufacturing company in Los Angeles for an unusual disc brake that didn't rely on a rotor/caliper assembly to function effectively. Attributed to inventor *Joseph M. Milan* and originally called the "Milan Brake," they became better known by the name of the company that tried, and failed, to make them a success: *Kinmont "Safe Stop" Disc Brake*.*

Left: Kinmont advertised its brakes with this little brochure, stressing extensive testing, police and government approval, racing successes, quality materials, and construction - all to no avail. It appears that few companies and/or agencies bought them for taxi and/or fleet use. Hot rodders purchased most of the small number of complete sets made, as much for their good looks as for their proven stopping power.

730

731

*Joseph Milan originally developed these unusual but effective disc brakes. When the *Kinmont Manufacturing Company* of Los Angeles purchased the rights to manufacture them as an aftermarket item, they became Kinmont "Safe Stop" Disc Brake, ("Mfd. Under Milan Patents"). They worked better than conventional drums of the era, but failed to garner much interest (aside from the hotrod circuit).*

732

	<p>The inside of the Kinmont brochure detailed stopping distances for the “Milan” brake vs. conventional hydraulics. The Kinmonts stopped in half the distance at 30 mph; they stopped 44-feet shorter than the competition from 40 mph and they came to a stop at an impressive 81-feet shorter from 50 mph.</p> <p style="text-align: right;">733</p>
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	<p>This page from a Kinmont brochure lists the original price of the brake-set as \$125.00 (\$117.50 plus \$7.50 for installation). In March and June 1949, respectively, <i>Bell Auto Parts</i> was running half-page ads in <i>Hot Rod</i> magazine offering full sets of Kinmonts, (for 1940-1948 Fords and Mercurys) priced at just \$52.00 Today, a full set easily sells for +\$12K (only +/-325 sets were made).</p> <p style="text-align: right;">734</p>
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	<p><u>Above:</u> hoping to attract hot rodders, the <i>Kinmont Manufacturing Company</i> had a display at the <i>First Hot Rod Exposition</i> (at the <i>L.A. Armory</i>) in 1948. The <i>Road Runners Club</i> gave away a 1932 <i>Ford Roadster</i>, equipped with a full set of Kinmont disc brakes. After sufficient sales didn't materialize, Kinmont sold its inventory to <i>Bell Auto Parts</i> who, subsequently, offered the brake sets at a significant discount (via <i>Hot Rod</i> magazine ads) through the 1950s.</p> <p style="text-align: right;">735</p>
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	<div style="border: 1px dashed red; width: 40px; height: 32px; margin: 0 auto;"></div> <p><u>Above:</u> this 1927 “T” Roadster was fitted with Kinmont disc brakes in front <u>Left:</u> in the September 1953 issue of <i>Speed Mechanics</i> magazine, an article appeared concerning Kinmont brakes (showing them on a 1934 <i>Ford Cabriolet</i>).</p> <p style="text-align: right;">736</p>
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	<p><u>Top:</u> this cutaway shows the complete Kinmont brake assembly for one wheel. It replaced <i>Ford</i> and/or <i>Mercury</i> brakes from 1939-48. Some machining was required for the installation (hot rodders could send their Ford hubs to <i>Bell Auto Parts</i> for this work). The aluminum “hat” was vented for cooling and there were slots for the expulsion of dust, water, etc. <u>Bottom:</u> properly installed (as on this 1932 <i>Ford Roadster</i>) the <i>Kinmont Safe Stop Disc Brake</i> were very attractive and worked extremely well</p> <p style="text-align: right;">737</p>
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	<p><u>Above:</u> this 1932 <i>Ford Roadster</i> has Kinmont disc brakes in all four corners <u>Left:</u> Kinmont disc brake detail on the '32 <i>Ford Roadster</i>. The cast aluminum “hat” interlocks with crenellated sections on the brake disc.</p> <p style="text-align: right;">738</p>
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Left: perhaps the most famous car ever to use Kinmont disc brakes was Clarence "Chili" Catallo's 1932 *Ford Three-Window Coupe* (built by Catallo, along with Detroit's famous *Alexander Brothers* and *George Barris*). By July 1961, when this photograph appeared on the cover of *Hot Rod* magazine, Kinmont discs were long out of production.

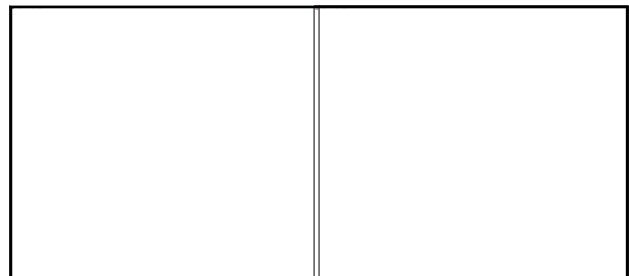
739

Not Just a Pipe Dream

740

Joseph M. Milan (an exotic car mechanic), recorded the first of his ten disc-brake patents in 1936. Supposedly, the basic design was patterned after a clutch-like brake assembly used on WWI mobile German heavy artillery pieces. The first competition use of the Milan-style brake can be traced to a 1941 Indy 500 race car owned by *Joe Lencki* and driven that year by *Emil Andres*. This first racing Milan brake was made entirely of aluminum. It consisted of a cast aluminum cover (a/k/a "hat") with twelve forward-facing vents that were angled to scoop in cooling air and direct it across a 360-degree continuous ring (a circular flat braking surface). The braking material (a soft asbestos compound with brass rivets made by the *Raybestos Corporation*) was attached in three places to the brake cover (a/k/a "driving member") which rotated with the wheel.

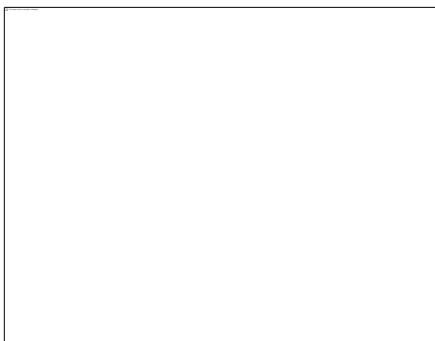
741



Left: the underside of an aluminum "hat" shows brake cooling slots and internal ribs for strengthening. These components were quality manufactured.

Right: the back-side of the Kinmont brake drum assembly shows the cast-iron, finned backing plate, a single wheel cylinder and twin fluted adjuster nuts (casting debossing indicated the assembly was patented). Brake surface adjustment was critical (0.020 all around, as measured with a feeler gauge).

742



743

"...the brakes had a surprisingly soft feel that would undoubtedly require some getting used to for the new users. Since the brakes are definitely not of the self-energizing type, there was no tendency for them to grab or lock."

Hot Rod magazine, May 1950

RE: the friction material was squeezed between a stationary backing plate and a pressure plate that resembled a conventional automotive clutch. Four simple spring straps return the plate to the "at rest" position. The simple adjustment consisted of just two nuts that regulated the clearance between the pressure plate and the backing plate, which was distinctively and efficiently finned to dissipate heat buildup. Although the Andres race car did poorly at Indy, race car aficionados (like *Preston Tucker*) took notice of these new-fangled brakes.

744

Left T&B: the Kinmonts disc brake was a kind of clutch assembly (top). The horseshoe-shaped section forces a circular pressure plate against the friction material, which is on both sides of a floating disc sandwiched between the pressure plate and the stationary backing plate. Four simple spring straps return the plate to "at rest" position. Kinmont disc brakes were designed to be operated by a standard Ford brake master cylinder (no proportioning valve was required if the Kinmonts were installed on all four corners). The friction pad (bottom) ran completely around the magnesium disc on both sides, providing twice as much brake lining than on conventional Ford hydraulic brake shoes of the period. A full 360-degrees of contact (without gaps) was provided. Thus, the Kinmonts didn't "grab" (when properly adjusted). The original lining was an asbestos composite

745

Above: front (left) and rear (right) backing plates differ front-to-back and side-to-side. The rear hub had a hole drilled for the emergency brake cable. Conventional Ford rubber "boots" (not shown) were used to protect the brake cable and keep water from entering the brake assembly.

746

"...the pressure plate functions just as its brother in a clutch, pressing the disc against the backing plate in a high-pressure sandwich"

Tom Senter

Above: the brake disc was made of magnesium, lined on both sides with friction material (similar to the lining on a clutch), riveted to the magnesium "hoop"

747

748

The *Kinmont Manufacturing Company* in Maywood, CA (a suburb of Los Angeles) produced hydraulic dredging equipment. During WWII, they manufactured a torpedo launching platform and built a prototype U.S. Army tank. Before the war, *Joseph Milan*, along with a group of investors, spent a great deal of money prototyping his novel brake design (he had been looking for a company to manufacture and market the brakes in volume). Coincidentally, *Bill* and *Ralph Kinmont* (heirs of the Kinmont Company's founding brothers) were seeking post-war manufacturing opportunities. Bill Kinmont, a racing enthusiast, had met Joe Milan sometime earlier and had seen his brake design. Hoping to develop a practical brake for the road, the Kinmonts retained Milan as a consultant and began manufacturing the "Kinmont 'Safe Stop' Disc Brake."

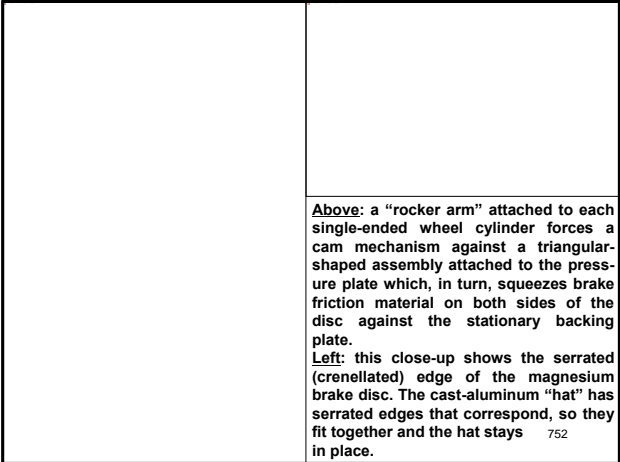
749

Early racing Milan brakes were all aluminum, however, it was felt they would not hold up to the rigors of on-road use. They had to be redesigned and scaled up to stop passenger cars weighing upwards of 3K pounds as compared with substantially lighter race cars (i.e. above). Kinmont's engineering department made the necessary changes, but they were under pressure from Milan's original investors who were anxious for the redesigned brakes to be put into production.

750

Kinmont designed a new, stronger backing plate (made of cast iron) and developed a brake disc with a serrated, toothed edge to interlock with the driving member or pressure plate. Four 13-inch Kinmont brake sets were built to be tested on 1946 Ford and Mercury passenger cars. Astutely, and anticipating a wider market, the company prototyped a 16-1/2-inch heavy-duty brake design with double discs that were suitable for heavy truck use. In hindsight, it appears as though Kinmont wanted to become an OEM supplier of these brakes for new makes (like Tucker and Davis) as well as a an aftermarket supplier of brakes that could be retrofitted to popular passenger cars, particularly fleet vehicles like taxis and police cars that were subjected to hard use. No doubt Kinmont chose FMC vehicles because there was a sizeable, existing inventory of 1946-48 and earlier Fords and Mercurys in service to retrofit the Kinmont units. *R.E. "Dick" Hulse* was retained by Kinmont to develop the marketing strategy that would introduce Kinmont brakes, first in southern California, then as part of a national roll-out. Orchestrated demonstrations were made to the Los Angeles and Glendale police department/s and even the *National Safety Council* that demonstrated how well Kinmont disc brakes worked in comparison to conventional hydraulic drum brakes.

751



Dick Hulse and his associates devised and executed a grueling 1K-mile on-road test of the Kinmont brakes. Their route consisted of all types of terrain, with frequent conventional and panic stops. Installed in a stock 1948 Ford sedan, the brakes proved to be virtually fade free, even in wet and freezing conditions. Reportedly, the Kinmonts were even tested on a hot rod at one of California's dry lake beds, with repeated stops from 125 mph. The Kinmonts passed every test with flying colors (reportedly with minimal lining material wear) and articles praising the brakes appeared in several Los Angeles newspapers. Installed in the company's test sedan, they were repeatedly demonstrated for fire and police officials and publicized through other venues. For *Mr. E. Levitt*, of the *Tucker Corporation* (and later for *Preston Tucker* himself), a demonstration of the brakes was performed. Besides wanting to supply brakes for the Tucker production cars, the Kinmonts attempted to interest Tucker in acquiring the brake division of their company. The Kinmont partners needed cash to re-finance their dredging supply division. Supposedly, retooling of the brakes for mass production of Tucker's was underway, but nothing came of either plan due to the early demise of the Tucker Corp. Stretched for cash and not seeing a booming civilian market emerging for disc-type brakes, Kinmont sold its brake division to *Roylyn, Inc.*, a Glendale, CA-based company that specialized in valves and couplings.

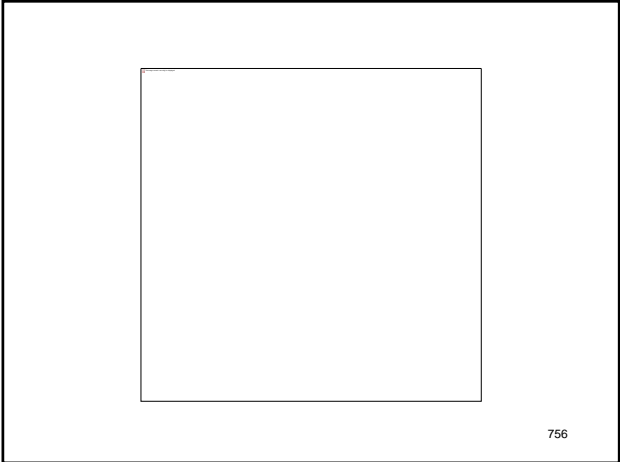
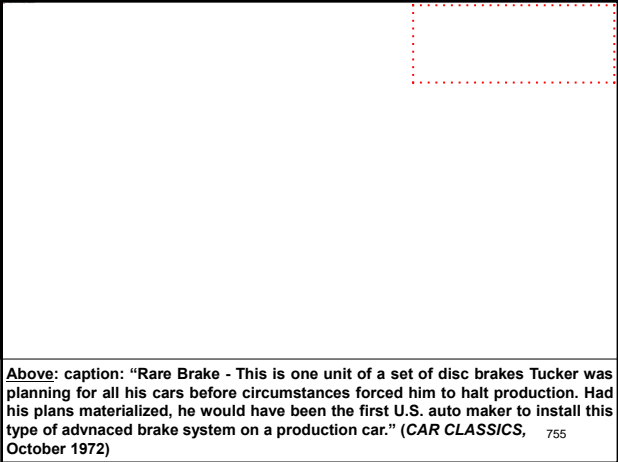
753

"...didn't have enough money to get one tooled in aluminum. So I used cast iron, and this made the load too heavy below the center of gravity"

Gary Davis

RE: period articles for both the Tucker and Davis refer to disc brakes, and vintage cutaway drawings of both Tucker and Davis cars clearly show the distinctive Milan/Kinmont finned backing plates. Prototypes of both makes experimented with Kinmonts, but neither car employed them in their limited production models, mainly due to their relatively high cost (as compared to conventional hydraulic brakes). As well, engineers for both companies lacked the time necessary had for extended in-service testing.

754



Quality Throughout

757

"...Another indication of the quality throughout the Tucker car was the fact all under-carriage parts, wheel suspension units, brake-backing plates, etc. use large 'Allen' bolts which have super strength. These are common on aircraft but not found on most other cars..."

CAR CLASSICS, October 1972

758

"...Typical of the extra thought given all functional units, power is driven through the four-speed all synchro trans-axle, double U-jointed shafts to each rear wheel, which are 'independently-sprung' via torsilastic units and trailing arms. Wheels never 'swing-under' but stay vertical in all conditions..."

CAR CLASSICS, October 1972

759

"...The Tucker unsprung weight was lowest in the industry. Wheel tread was 65-inches, wheel-base 128-inches, center-of-gravity 14-inches above the pavement. With this low center-of-gravity, the car actually lowers in back and the front holds in normal position all through the braking period..."

CAR CLASSICS, October 1972

760

Less is More

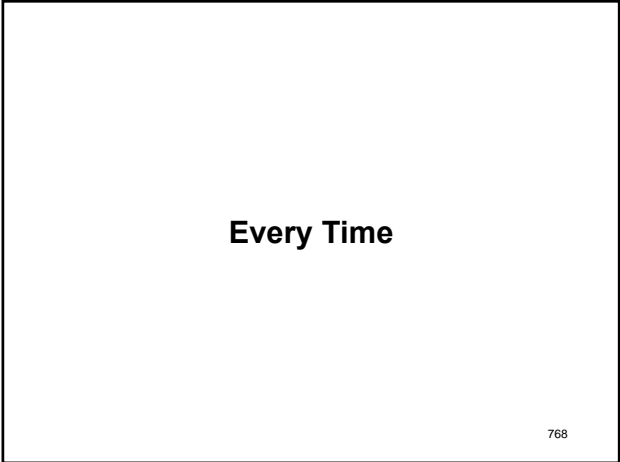
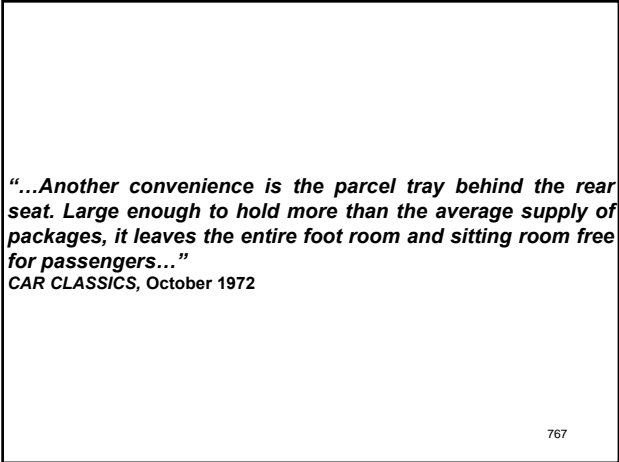
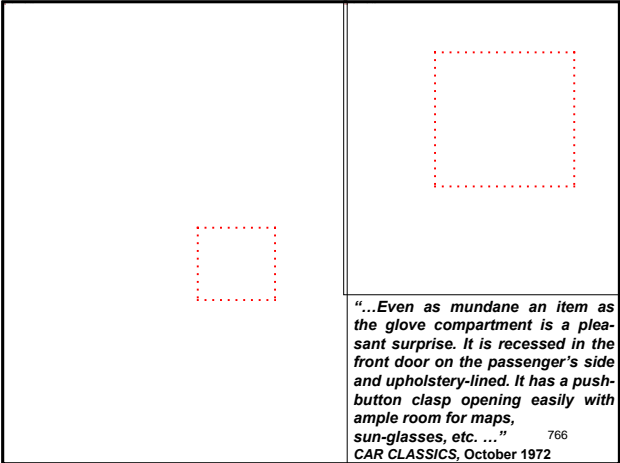
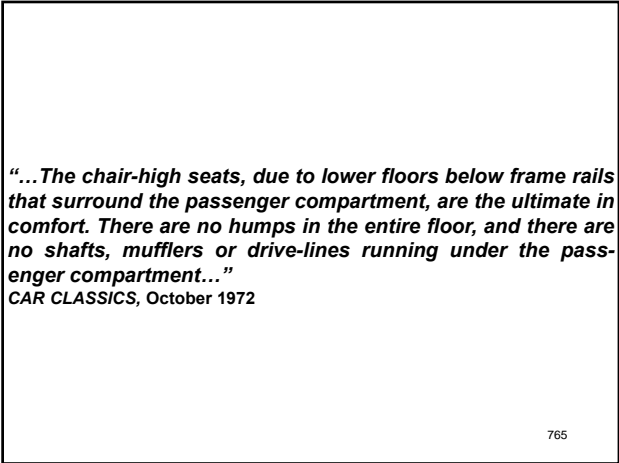
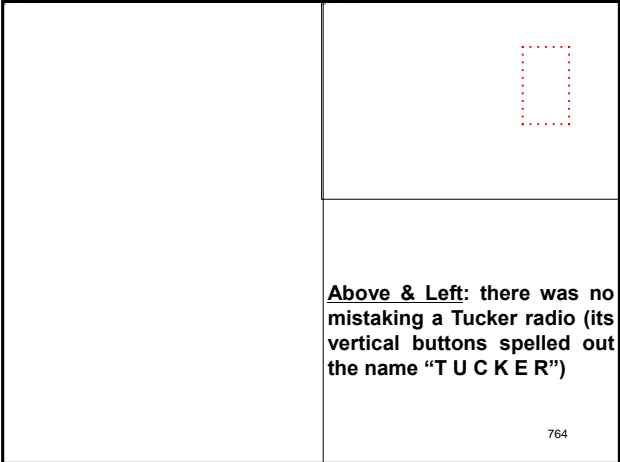
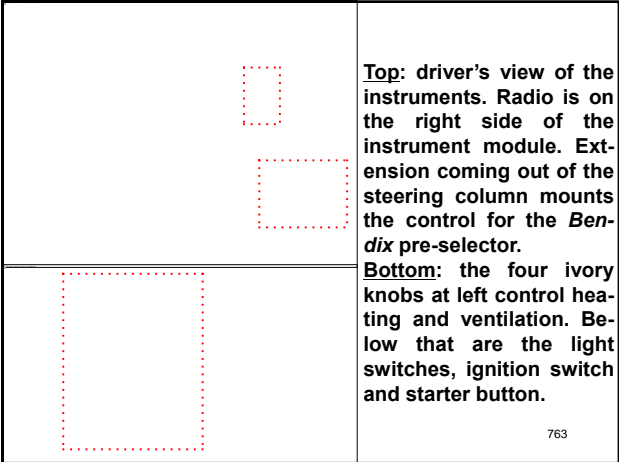
761



"...Every detail of the interior of the Tucker was thoroughly considered. The conventional instrument panel is replaced by an attractive sponge rubber crashboard cowl. All the instruments are above the steering column. Under the cowl is a spacious safety chamber, protected by the steel bulkheads, which the driver and the front seat occupants can drop into, in a split second, in case of an impending collision. There are absolutely no knobs, ashtrays or metal gadgets of any kind on which one could be injured..."

CAR CLASSICS, October 1972

762



"...An all-weather assurance of quick and reliable starting is the Tucker ignition. A hot, lasting ignition-spark in which all the gas in the cylinder is ignited every time. A satisfactory answer to engine 'pings' and power knocks..."

CAR CLASSICS, October 1972

769



770

The Pleasure Was All Mine

"...What a rare and unusual opportunity I have to be able to speak now for the reliability of the Tucker. Driving mine daily, twenty-four years since Mr. McCahill tested the Tucker, I can give a recommendation for reliability and trouble-free service beyond the wildest dreams of any production car in automotive history..."

CAR CLASSICS, October 1972

771

772

"...Nearly 200,000 accident free miles are on Tucker serial number 14, and the maintenance has been so minimal it amounts to almost nothing but tires and fuel. Because of my interest in these automobiles and their restoration I have done some work on Tucker serial number 14 out of curiosity and pleasure..."

CAR CLASSICS, October 1972

773

"...Astonishingly, nearly all of the automobiles finished at the plant (51 is the nearest count I have at this time) are now, to this day, accounted for. Many, through terrible misuse, are in very bad condition. Proudly, through the years, I have 'spanked' many into a new life with careful restoration procedures. This has been the most rewarding work I have ever done in my life. As a licensed aircraft and rocket mechanic with 25 years in my craft, I am in a position to appreciate the quality construction of the Tucker..."

CAR CLASSICS, October 1972

774

The Future That Never Was

775

“...Being so familiar with this historical event in automotive production. I have often pondered what type of Tucker would be on our highways today had production never stopped. My guess is Tucker would have developed the turbine car years ago. Secondo Campini of Milan, Italy, world’s foremost authority on jet propulsion and the gas turbine, was named vice-president in charge of turbo-jet motor development and research for the Tucker Corporation in 1948...”
CAR CLASSICS, October 1972

776

In 1939, Italian inventor *Secondo Campini* convinced the *Caproni Company* to build an airframe to test his new power unit, which he believed would replace the propeller. The Italian aircraft industry had decided that a gas turbine engine was impractical (even as German and British scientists were testing theirs). The *Caproni Campini N.1* (above) flew in 1940 and has sometimes been touted as “The World’s First Jet Aircraft” (it was, rather, an early “Motorjet-powered” test aircraft). Power came from a relatively small piston engine inside the forward fuselage, which turned a variable-pitch compressor in what we would today call a “ducted fan.” A rudimentary form of afterburner allowed fuel to be burned in a propelling nozzle to give some extra thrust. Despite this, the N.1 would only make 233 mph, slower than the *Fiat CR.42* biplane.

777

- A:** The N.1’s power system had no hot compressor section. The cold compressed air was ducted and mixed with jet fuel and ignited, giving extra thrust.
- B:** Two prototypes of the N.1 were built, the second being preserved at the Museo Storico dell’Aeronautica, Vigna di Valle, north of Rome.
- C:** A more powerful supercharged engine might have made a difference to the N.1’s pedestrian performance, but wartime pressures brought an end to development.
- D:** The low power of the N.1’s piston engine kept it below 13,124-feet, where the ducted fan arrangement would have been effective.
- E:** The wing was mounted as low as possible and the cockpit as high as possible to give the N.1 the most straight airflow to the deeply buried engine.
- F:** Use of the afterburner massively increased the fuel flow, but only added an extra 25 mph to the top speed of the N.1.

778

“...Campini’s addition to the Tucker staff of outstanding engineers and automotive executives was another move designed to keep the corporation well ahead of the field in automotive research...”

CAR CLASSICS, October 1972

Above: caption: “These men are the builders of the Tucker ‘48 - Preston Tucker heads a group of executives who are honored names in the automotive industry. Each has left his imprint on the methods of manufacture and distribution of motor cars in use today. Now these men are making automotive history all over again, building a car that will be the inspiration of engineers for years to come.” The *Tucker Corporation* acquired all of *Secondo Campini*’s patents, including one for an automotive gas turbine (for possible use in a future Tucker automobile).

779

And it’s Good on Gas Too!

780

"...In all these years of driving my Tucker, I have had a consistent fuel mileage at 50-55 mph of 20 miles per gallon of 'regular' gas. I can't help but feel this type of fuel consumption would have lessened the smog problem, too, if enough of these cars could have been produced..."

781
CAR CLASSICS, October 1972

The Reality of My Dreams

782

"...Among my files are detailed drawings of my 'dream car' at the age of 14 years old. Surprisingly, this drawing bears a fascinating resemblance to the 1948 Tucker. I had dreamed up what I wanted but it took an unbelievable collection of the finest automotive minds in the world to ultimately produce in lasting quality the reality of my dreams..."

783
CAR CLASSICS, October 1972

Never!

784

"...I am stopped and questioned constantly whenever I drive my Tucker. Naturally, I get the same questions over and over, and I never mind answering them in detail. But the one question I answer the most has always a one word reply: 'Hey Mister...ya want to sell that car?' 'Never!'"

785
CAR CLASSICS, October 1972

Part 7

The Fantastic Story

786

Truth in Advertising

787

On June 25, 1949, the former "Colliers" magazine published "The Fantastic Story Of The Tucker Car."

As told by "Colliers," it was, indeed, a fantastic story.

According to the magazine article, the "Tucker Torpedo" was little more than a "Tin Goose," a makeshift monstrosity, a not-able-to-ramble wreck, foisted upon a naive, unsuspecting public.

Among the indictments: The "Tin Goose" did not even have a reverse gear.

The publication, recounting Tucker's "world premiere" (June, 1947), stated that only hours before the unveiling, the "Tucker" sank to the floor and was propped up by frantic mechanics; how, that morning, the "Torpedo," leaking oil and water, struggled and sputtered to the display plant.


It also reported that, during the grand debut, Tucker himself drove the car only 50 feet, at which time plant guards surrounded the "Torpedo" and told the crowd to "Look, but don't touch."

"Preston Tucker told the world he would revolutionize the automotive industry with a rear-engine car in the low-price field. But nearly \$26,000,000 is gone, and only 49 cars have been built by hand - which adds up to something more than \$510,000 per auto. This doesn't read like the Tucker ads..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

788



Above: caption: "Pittsburgh's Half-Million-Dollar Orphan Car - the only Tucker in this area - sits on the used car lot of 'Red' Harris, 5180 Baum Blvd. Tom Gugliuzza is in the luggage compartment." 789

SELL (Continued)
(Motor Trend, July 1954)

'48 TUCKER: original, perfect condition, light blue paint, blue upholstery, whitewall tubeless Firestones, 10,000 miles, flat 6 in rear, electric shift, \$4500. W. Lund, Jr., 2700 France So., Minneapolis 16, Minn.

'37 SUPERCHARGED CORD sedan, factory rebuilt, original and perfect throughout, new blue



790

Truly Modern

791

"...The 'first completely new car in 50 years' had its world premiere one June day two years ago. In the world's largest factory, the Chicago plant where Dodge made B-29 engines, 3,000 car dealers from all over America and abroad strained for a glimpse of the Tucker Torpedo, a 'truly modern automobile descended from race track champions.' Reports and rumors had told of a car that would weigh 1,000 pounds less than ordinary cars and whose revolutionary rear-end motor - 'the most effective power plant ever built' - would deliver up to 35 miles per gallon of gasoline and 'permit continuous cruising at 100 miles an hour.' It would make all other cars obsolete, said the reports. So exciting was the car's advance billing that many in the audience had already plunked down up to \$50,000 apiece to get the first dealerships. In an expectant hush suitable to so historic an event, the curtains of an improvised platform parted, revealing to the accompaniment of pleased gasps, a maroon, teardrop creation so low and sweeping in its lines that one reporter wrote, 'It looks as if it's going 90 even while standing still'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

792

Tucker 'Torpedo' Pops Eyes, Stops Traffic in Titusville; Demonstration Is Thrilling

A Tucker "Torpedo," the eighteenth off the production line, visited Titusville Sunday and attracted quite a lot of attention.

The six-cylinder rear engine car was the property of George McKinney of Bradford, who was visiting his aunt and uncle Mr. and Mrs. L. G. McKinney. The Bradford man is distributor for the Tucker in 19 counties, his territory extending from Astabula through Buffalo.

When the car was first advertised nationally two years ago, its appearance seemed very radical. To the Titusville friends, however, the car is striking looking, streamlined with much chrome, but it certainly doesn't look odd. The new models of other manufacturers have much the same ultra-modern styling.

Mr. McKinney gave demonstrations to a few Titusville friends. The car is fast, powerful, and maneuverable. Its flat, six-cylinder rear engine develops 175 horsepower. The engine is of the aircraft type and could be removed from the car and installed in a Cessna or Stinson plane.

Demonstrations have been given by Mr. McKinney elsewhere of from seventy to eighty miles an hour in traffic, and from the pickup terrific. Within the hour of a long Titusville square the car can easily make 70 miles an hour from a standing start.

The car rides well, each wheel being individually sprung. Riding in Tucker's

the rear seat, the weight of the engine is noticeable but seems to help the car hold the road well on curves. It was quite a sensation, however, to sit in the back seat, watch the driver start the car and then hear the motor turn over from behind the seat.

Like a few of the newer models, a passenger has to step up to get out of the car. The floor is only nine inches off the road. In less than an hour at a service garage, this car—once it is raised to ten and three-quarters inches, if the owner desires. Parked opposite the McKinney residence on Brown street, the car four-door Tucker sedan brought interested on-lookers to the spot in a hurry. The "double takes" of those who spotted the car were amusing. A majority of the people would drive by, not giving the car more than a glance. A few hundred feet further on, however, the fact that it was a Tucker car or something out of the ordinary would register. They would turn their cars around and hurry back to give it a good look-over.

Mr. McKinney has had the car a little over three weeks and has driven more than 4,000 miles. He has only checked the gas consumption accurately on one occasion. He found that he was getting slightly over 20 miles a gallon.

Yes, Mr. McKinney has been stopped plenty of times by cops. But not for a ticket. They all want to inspect the Tucker said.

CHICAGO, Oct. 11 (AP)—George P. Tucker, President of the Tucker Automobile Corp., announced today that Tucker franchises to \$7,733,140 had been sold to distributors and 1028 dealers throughout the country as of Sept. 1.

Tucker said the funds supplied by the distributor-dealer organization was roughly half that supplied by the public through the common stock. Production of the Tucker car will begin, Tucker said.

793

DISTRIBUTORS NAMED FOR NEW TUCKER CAR

The 1948 Tucker automobile, a rear-engined vehicle, will be distributed in nine counties of the Canton district by the Tucker-Canton Motor Co., officials have announced.

Officers of the newly-organized firm are James E. Ellis, president; William Bream, executive representative, and George Ellis, brother of James, regional sales executive. No location has been obtained for salesroom or garage.

Organization of agencies in Richmond, Ashland, Wayne, Holmes, Tuscarawas, Carroll and Columbiana counties now is under way, James Ellis reported. A demonstrator model is expected July 15.

The Tucker car will have a six-cylinder 150-horsepower aluminum engine. It will weigh less than 3,000 pounds and will sell

AUTO DEALERSHIP NOW AVAILABLE

FOR THE NEW

Tucker Torpedo

The most talked-about automobile in the world. See James J. Smith at Hotel Jefferson, Thursday evening or at any time Friday, February 14.

Blackhawk Tucker Sales, Inc.

809 American Building
Cedar Rapids, Iowa

JAMES J. SMITH

Telephone 3-1063

794

JACOB EGGBEEN
Announces his Appointment as dealer
of the

NEW TUCKER TORPEDO

AUTOMOBILE

COMPLETELY NEW — Yet With Engineering Principles
COMPLETELY APPROVED!

Wait for the New Tucker '48!

EGGBEEN'S TUCKER TORPEDO SALES, Inc.

GENERAL OFFICE — SCHMIDT HARDWARE BLDG.
SHERIDAN FALLS

795

Tucker Dealers Move to Speed Car Output

Chicago, Ill. (AP)—A group of Tucker automobile distributors and dealers banded together Tuesday for the avowed purpose of "getting the Tucker car to the public."

Ten dealers and distributors claiming to represent five hundred others in the nation formed the Tucker Distributors and Dealers Committee.

796



797

New Tucker Car Unveiled

BY DON MACIVER,
Business Editor of The News.

The widely heralded new Tucker automobile, unveiled for the first time Thursday in Chicago to auto dealers and distributors, will retail at a price of \$1,900 "when and if" it goes into production.

Preston Tucker, 44-year-old race car designer, says his car is "the first completely new automobile in fifty years" and is a "better and safer car than ever has been built." Tucker heads the corporation which has leased the big Chicago Dodge plant from War Assets Administration and is awaiting a Securities and Exchange Commission ruling on whether it can proceed with its financing program—the proposed sale of twenty million dollars in stock to the public.

Tucker announced his car has a 2,800-pound shipping weight, 128-inch wheelbase, 150-horsepower airplane-type motor located in the rear and stands 60½ inches high.

"...Gorgeous girls, their lines as arresting as those of the Tucker Torpedo, now paraded on the platform, each bearing a papier-mache replica of some of the 800 parts that the Tucker had supposedly eliminated, and daintily tossed them into a trash barrel. 'The Tucker needs no clutch,' piped a blonde. 'The Tucker needs no differential,' announced a redhead. 'The Tucker needs no transmission,' chirped a brunette. The models lifted the front hood and put in luggage where the engine should have been. They lifted up the rear hood to show an engine where the luggage is usually stored..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

798



799



800

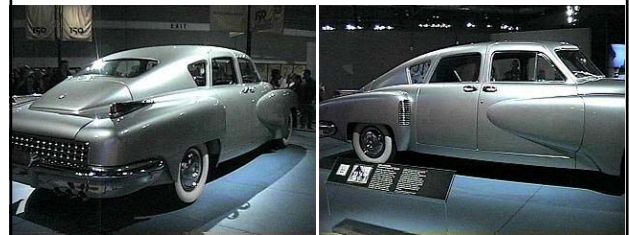


"...About as long as a Cadillac, it had a third, 'Cyclops eye' headlight planted in the middle of the nose. The front bumper looked like the horns of a Texas steer, and the front fenders curved like the half-folded wings of a hovering bird..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

801



802



803

"...A boyish figure, face flushed and grinning, bounded to the platform. It was Preston Thomas Tucker, the then forty-three-year-old president of the Tucker Corporation, who, unknown and unsung only a few months before, had leaped fullblown into the driver's seat of a new and challenging automobile enterprise. Advertisements and press notices described him as 'one of the nation's top designers and inventor of many automobile improvements.' 'In three months (i.e., by September, 1947) we'll build 3,000 of these,' announced Tucker..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

804



805

Look, But Don't Touch

806

"...He bounced into the Torpedo, started it up and drove the car in triumph down a ramp for some 50 feet. Then plant police immediately surrounded it. 'Look, but don't touch,' they warned. Backstage, behind the glamor, the Tucker Torpedo looked a little different. If the audience had been able to slip in a few hours before, it would have been in on bedlam. The car's body had sagged through the aluminum wheel suspensions and plunked ignominiously to the plant floor. The extra-heavy frame, the 600-odd pounds of lead poured into the hastily handmade body, and the load of extra storage batteries needed to start up the engine, had been too much for the revolutionary suspension system..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

807

Lyman Describes Tucker Torpedo Car

Kenneth E. Lyman, automotive engineer and technical adviser to the president of the Tucker corporation, discussed the post war car in a lecture before the Western Electric company's Hawthorne Science club on Thursday, April 10.

Lyman described in detail the various new features of the Tucker Torpedo car, which embodies such radical changes from conventional design as a rear mounted motor, absence of transmission, instruments in the center of the steering wheel, new body lines, and disc type brakes.

"...For seven hours, mechanics worked frantically to put the Tucker together again, this time Improvising new suspension arms of beryllium copper. Had no guards been posted at the car, the audience could have learned other things about it..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

808

"...The Torpedo (as Tucker's master mechanic William Stampff later revealed) had no reverse gear and couldn't back up. The rear engine, described by Tucker's own executives as a 'pipe fitter's dream,' and by the SEC as an 'engineering monstrosity,' couldn't even start without auxiliary power from additional storage batteries. Instead of the advertised new Tucker torque converters (for automatic transmission) an inquisitive mechanic could have found two old Dodge fluid couplings; instead of a sealed-in cooling system, an ordinary cooling system with conventional water pump. The dashboard instruments had nothing to do with the insides of the car..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

809



810

A Torpedo-Type Body

811



“...The body was assembled, in part, from a 1942 Oldsmobile which, dismantled and cut apart, was welded into the torpedo-type body...”

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

812



The first full-scale prototype (a/k/a “Tin Goose”) was built-up from a 1942 Oldsmobile body. This allowed designer *Alex Tremulis* to establish the critical location of door hinges (in order to allow the door opening to extend into the roof structure). A styling mock-up, Tremulis had intended to build the first prototype out of clay, but the lack of available clay prevented this. He could have built it out of wood, but he didn't have the pattern-shop facilities available, at the time. Tremulis decided to make it out of sheet metal because it was readily available and he had a group of expert metal craftsmen on hand.

813

“...As each part of the new Tucker body was finished the original part from the Olds was junked, so when they got through about the only parts that remained from the original body were the roof, which had been completely reshaped, and door handles, window mechanisms, locks and hardware – parts that were the same whether they came from another automobile or from the manufacturer's bins. The first car was, of course, completely handmade, and nobody connected with the job ever claimed it wasn't. It also had plenty of solder, probably several hundred pounds. Maybe Cellini could have hammered out a body in ten years without using solder, but nobody in his right mind would try it on a one-shot job where one of the most important factors was speed...”

RE: excerpt from *The Indomitable Tin Goose* by Charles T. Pearson (1960). The 1942 Oldsmobile served as a makeshift body buck for the Tin Goose prototype. Metalshapers and fabricators who worked on the prototype included *Herman Ringling* (an Indy car builder that Tucker met in Indianapolis), *Al McKenzie* (a former racing mechanic), *Emil Diedt*, *Joe Lencki* and *Gene Haustein*.

814



“...was born in an atmosphere of trial and error, hoopla and hurry-up. It was a stubborn child. It did not live up to its parents' expectations. But it showed flashes of genius as well as temperament...”

RE: excerpt from *The Indomitable Tin Goose* by Charles Pearson (1960)

Left: the original Tucker “Tin Goose” prototype

815

“...Dubbed the Tin Goose by Tucker's own engineers, the Torpedo would run but little on its own power. That morning, leaking oil and water, it had chugged painfully to the display plant. This was the situation backstage. Out in front the crowds pushed eagerly forward...”

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

816

"...Preston Tucker made no mention of an event in which, according to a suit filed later, the car collapsed before the premier and required four hours of frantic patching by mechanics. The suit also said the Torpedo was built in part on a 1942 Oldsmobile chassis, the two Ford carburetors were used instead of the advertised fuel-injection system and that the machine had to be pushed to its exhibition place...."
Coronet magazine, November 1949

817

Where Did the Investors' Money Go?

818

"...A bizarre episode, the debut of the Tin Goose was part of an even more incredible series of events which, culminating in the collapse of the Tucker bubble, swallowed some \$26,-000,000 of big and little people's money. What happened to these millions? Why didn't Tucker get into production with his Cyclops-eyed car?..."

Lester Velie

RE: excerpt from his article en-titled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

819

Looking for Answers

820

"...Swarms of government probers: the FBI, the SEC, a federal Bankruptcy Court, a grand jury, and sleuths from the War Assets Administration (owner of the Tucker plant) dug for months into the wreckage of Tucker's carless car empire to find many answers..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

821



822

'Immediate Delivery'

ST. LOUIS, Oct. 24.—(P)—John Spatafora probably will keep his new Tucker automobile for a long time. He bought one of the 23 cars produced by the Tucker Company at a bankruptcy auction in Chicago last Wednesday. He offered "immediate delivery" on it today to anyone who wanted to pay \$19,995.

823

Other People's Money

824

"...Some of them, as reconstructed by SEC accountants, were: Officers and promoters took approximately \$4,000,000 of Tucker Corporation cash. Of this, some \$750,000 went to Tucker. The Tucker Corporation spent \$1,011,000 to advertise as accomplished facts radical and experimental ideas which might be unsolvable or at least take years to solve. The Tucker Corporation paid a machine shop controlled by Tucker \$350,000 for engine and transmission work. D. McCall White, designer of the Cadillac V-8, consultant to Tucker and a Scotsman, protested that the jobs should have cost about \$40,000..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

825

"...The Tucker Corporation footed Tucker family living expenses at Chicago's Drake Hotel for six months. This included paying for clothes, cameras and entertainment which the family charged to hotel bills. Later, had they but known it, buyers of Tucker stock paid items like \$740 for pictures taken of daughter Marilyn's marriage to R.N. Parsons, who, fresh from college, went on the Tucker Corporation pay roll at \$10,000 a year. The company purchased an airplane from Tucker after paying him a three-month rental fee of \$15,000. The company indirectly put out \$44,000 for a yacht for Tucker, for which he had paid \$23,000. Ostensibly for marine-engine research, the yacht was manned by a crew of two, one of whom described himself as 'engineer in charge of drinks'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

826



827

"...This freewheeling use of other people's money explains only part of the Tucker promotion puzzle. Some other questions may never be answered. How did an obscure young man without wealth or reputation win the juiciest plum in the government's postwar larder - the \$171,000,000 Dodge plant? Even more remarkable, how did he win this plant when he was already in difficulties with the government on tax fraud charges and sued by his wartime employer, Andrew J. Higgins, for an accounting of \$845,000?..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

828

A Fraud Upon the Purchasers

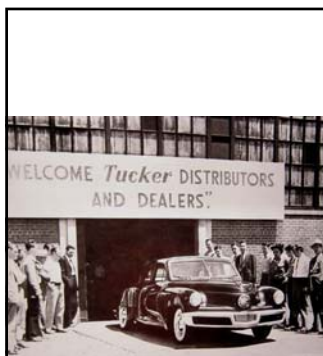
829

"...How did Tucker raise millions after the SEC had questioned the way he handled company money, and California officials had barred his stock as 'a fraud upon the purchasers?' Hurdles, indeed, for any enterprising young American businessman, but Tucker surmounted them all. 'This is a big deal, an international deal,' he said. This was true. In the Union of South Africa and in Siam, in Rhodesia and in Egypt, in Argentina and in Belgium - in 39 foreign countries all told, businessmen kicked in from \$1,000 to \$40,000 apiece for the right to sell 'the car of tomorrow'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine. The *Tucker Export Corporation* was also formed, based in New York, which was established as an entity to manage worldwide sales of Tucker cars. Headed by Preston Tucker's long-time friend, Colombian national *Max Garavito*, distributorships were set up internationally, including South America and South Africa.

830



"...In America, 1,800-odd dealers and distributors paid \$6,300,000 for the same privilege. Then they built an estimated \$100,000,000 worth of showrooms. These remained mute and empty memorials to the car that never came - except to 28 dealers who paid \$5,000 apiece for hand-made samples..."

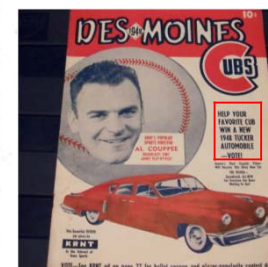
Lester Velje

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

831



Win a **TUCKER '48 Auto**—the first completely new car in 50 years. Tune in on radio station **KRNT** every Sunday afternoon at 3 p. m.—See **Sleper Sales Co.**, for more information.



832

Hear How You
Can Win A
**NEW
TUCKER**
'48

On That New
Show
"SPEAK UP AMERICA"
Featuring
JOHN B. KENNEDY
Every Sunday
570 On Your Dial
6:30 P.M.

WNAX

**MIDGET
AUTO RACES
TONIGHT**
Time Trials 6:00 P. M.
Races 7:00 P. M.

SEE THE NEW
TUCKER AUTOMOBILE
...PERFORMING ON THE TRACK
BETWEEN THE RACES

**JANTZEN
BEACH ARENA**
Admission \$1.50 (inc. tax)
Tickets Now on Sale at Jantzen Beach Office

833

833



Tucker

*If you are looking forward to owning a Tucker
see your nearest Tucker Dealer*

<p>ALABAMA Birmingham, Montgomery ARIZONA Phoenix CALIFORNIA Los Angeles FLORIDA Jacksonville ILLINOIS Chicago INDIANA Indianapolis KANSAS Kansas City MICHIGAN Detroit MINNESOTA Minneapolis MISSOURI St. Louis NEBRASKA Omaha NEW YORK New York City OHIO Cleveland PENNSYLVANIA Philadelphia TENNESSEE Nashville TEXAS Dallas VIRGINIA Richmond WASHINGTON Washington WEST VIRGINIA Charleston WISCONSIN Milwaukee WYOMING Cheyenne</p>	<p>ALASKA Anchorage ARIZONA Phoenix CALIFORNIA Los Angeles FLORIDA Jacksonville ILLINOIS Chicago INDIANA Indianapolis KANSAS Kansas City MICHIGAN Detroit MINNESOTA Minneapolis MISSOURI St. Louis NEBRASKA Omaha NEW YORK New York City OHIO Cleveland PENNSYLVANIA Philadelphia TENNESSEE Nashville TEXAS Dallas VIRGINIA Richmond WASHINGTON Washington WEST VIRGINIA Charleston WISCONSIN Milwaukee WYOMING Cheyenne</p>	<p>ALABAMA Birmingham, Montgomery ARIZONA Phoenix CALIFORNIA Los Angeles FLORIDA Jacksonville ILLINOIS Chicago INDIANA Indianapolis KANSAS Kansas City MICHIGAN Detroit MINNESOTA Minneapolis MISSOURI St. Louis NEBRASKA Omaha NEW YORK New York City OHIO Cleveland PENNSYLVANIA Philadelphia TENNESSEE Nashville TEXAS Dallas VIRGINIA Richmond WASHINGTON Washington WEST VIRGINIA Charleston WISCONSIN Milwaukee WYOMING Cheyenne</p>
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LOCAL BUSINESS BEAT—

TUCKER TORPEDO


ON DISPLAY HERE



834

Robert Dashow Welcomes You to the Opening
MARCH 20TH
MONTANA TUCKER SALES, INC.
25TH AND MONTANA AVENUE
BILLINGS, MONT.

MONTANA DISTRIBUTORS OF THE
Tucker '48
The First Completely New Car in 50 Years



In preparation for the arrival, here this very one of this exciting new car, Montana Tucker Sales, Inc., is formally opening its new and ultra modern sales and service headquarters for the inspection of motorists in the Billings area. Come in and see our complete facilities for the scientific servicing, maintaining and repairs of all makes of motor cars. View our wide and attractive line of late model USED CARS, and compare their QUALITY, SERVICE and PRICE with the best cars offered anywhere in Billings. Bring in your car for expert appraisal and the type of service that keeps 'em running at minimum cost. We have arranged a comprehensive exhibit of pictures and features of the Tucker '48, the really new car you have been waiting for. Later this very year, this advanced new passenger automobile will be ready to drive. You owe it to yourself to get acquainted with the car so completely new in line and design...so completely proved in engineering principles that it will still be a leader many years and thousands upon thousands of miles from now."

835

Tucker '48 Outlet To Open in City

Montana Tucker Sales, Inc., will take possession of the building occupied by Custom Tire, Inc., Montana Avenue and Twenty-ninth Street, Monday as distributing headquarters for Montana and northern Wyoming for the new Tucker '48. Robert Dashow, president of the distributing firm, announced Friday.

Dashow, formerly of Rochester, Minn., said the building, also would be the retail outlet for the Billings area. Opening of the garage is planned March 20.

Dashow attended the first annual stockholders meeting in Chicago March 9 and inspected the Tucker '48, which automotive writers have termed "little short of revolutionary," with disc brakes, engine mounted crosswise over the rear axle and a permanently sealed cooling system.

The firm president said his family will arrive from Rochester after the end of the school term. His associates also plan to move to Billings, he added.

Above Left: caption: "The New Tucker is Here - The new Tucker car arrived by special plane from Chicago early Tuesday morning and made Billings the first city west of Minneapolis to have a public showing of the Tucker '48 car. Hundreds of people have been admiring the new revolutionary rear-engine car at the sales floor of the Montana-Tucker Sales, Montana Avenue and 25th Street, where it is now on display. Robert Dashow, president of the local Tucker firm, completed arrangements for the showing while in Washington, D.C. recently, where he was elected to a 10-man board of Tucker distributors."

Above Right: caption: "Getting Ready for Tucker - Robert Dashow (seated) president of Montana Tucker Sales, Inc., confers with Leo Walsh, vice-president, and Ruth Gilbert, assistant secretary-treasurer of the company, regarding plans for the Tucker showing which was held Wednesday, and the dealer meeting which is being held today (Thursday). The local company is distributor of the new Tucker car for Montana and northern Wyoming."

836

New Tucker Sedan is Featured in Billings

The 1948 Tucker sedan, hailed as the "first completely new car in 50 years of automobile history," arrived in Billings by special plane Tuesday, and is attracting large crowds to the Tucker showrooms here.

Fred Rockelstein, executive vice-president of the Tucker corporation, arrived with a group of company executives Wednesday afternoon for the dealer meeting scheduled Thursday. They were met at the airport by Robert Dashow, president of Montana Tucker Sales, Inc., and a number of Billings residents.

The party took to the showrooms, where their rooms were raised by a "vice party" of Crow Indians, but a subsequent soap-sudsing showed no mortal damage had been done.


Visitors to the Tucker showing saw a line, white, semi-erect sedan of radical but beautiful design. Safety features of the car include a third headlight, the "Cyclone Eye," which turns with the wheels, lighting the way around curves to make night driving safer and easier. There is no conventional front-end hood. The passenger half of the front seat is held by a suspension "crash pad," as a safeguard in the event of collisions. The sedition, which is rubber mounted, and a low front fender will crush the entire windshield out of the frame.

Now, engineering features which attract attention are individual wheel, suspension, multi-disc differential, disc brakes, and torque converters which eliminate clutch, transmission and differential, applied power to wheels direct from the rear engine. The Tucker has no fewer than 100 other car. The 14-horsepower power engine gets 20 miles per gallon at moderate speeds, according to designers.

Above Left: caption: "Robert F. Dashow, president of Montana Tucker Sales, Inc., beams with pride at the revolutionary Tucker sedan, first to be seen west of the Mississippi, arrives at Billings Municipal Airport. The beautiful sea-green model attracted thousands to the Tucker show-room on Montana Avenue. Visitors inspected engineering and safety features which make the Tucker 'the first really new car in 50 years of automobile history.'"

Above Right: caption: "The ultra-modern Tucker contrasts with an old-time stagecoach in front of the Northern Hotel. Fred Rockelstein, vice-president of the Tucker Corporation, and a group of company executives, rode in the ancient coach from the airport to their hotel. They held a meeting for Tucker dealers of Montana and Wyoming in Billings last Thursday. Robert F. Dashow, of Billings, president of Montana Tucker Sales, Inc., is a member of a ten-man board for international dealership policy formulation."

837



838

GRAND OPENING

THE FIRST COMPLETELY NEW CAR IN FIFTY YEARS



HARGIS MOTOR SALES
Everyone is invited to come and see on display
Saturday and Sunday
October 2nd and 3rd

Tucker

If you are looking forward to seeing a Tucker you may now place your order
HARGIS MOTOR SALES

839

Thanks The Review for Part in Successful Opening

ROLLIN HARGIS, President

Hargis MOTOR SALES
Tucker MOTOR CARS
HARRISON AVE. & ROUTE 58, RIVERHEAD
Telephone: Riverhead 3696

Frank C. Forbes
Business Manager
County Review
Riverhead, New York

Dear Mr. Forbes:

Permit me to extend my thanks to The County Review for a most auspicious opening and showing of the new Tucker car. I am very grateful to your publication for broadcasting this event in your valuable advertising medium.

More than 7,000 persons were estimated to have visited our showroom over the past weekend to inspect this new automobile, and we feel that your publication had no small part in bringing about this success in Riverhead.

In addition, I wish to extend my most sincere thanks and appreciation to the people who so enthusiastically responded to my first showing of the Tucker car in Riverhead.

Yours very truly,
Hargis Motor Sales
Signed: Rollin Hargis

840



841

CHICAGO, June 7.—(UP)—Buyers of the new Tucker automobile will pay in advance for accessories—\$270 worth—and will agree not to resell the car for one year under terms of a novel method of financing, it was revealed today.

Officials of the corporation confirmed trade reports, that the firm planned to raise \$27,000,000 by this method before beginning production on the new car about July 1.

Under the plan, they explained, each prospective buyer would purchase \$270 of accessories and receive an allocation number to determine the date of delivery on his automobile. Production will, get under way at a rate of 50 cars hourly.

Preston Tucker, president, said that the clause prohibiting resale of the car for one year was included to cut down on the "black market."

"...Another 50,000 plain Joes - cabdrivers and mechanics carried away by tales of the miracle car, wage earners, G.I.s and G.I.s' widows - traded \$17,000,000 of savings for Tucker Corporation shares. And still other cash-happy folk plunked down \$2,300,000 for seat covers, radios, heaters and other accessories to put in a car that was not then, nor ever, in production. They did it to win places in line for Tucker cars..."

Lester Velie
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine
Left: article concerning the selling of accessories to raise funds

842



843



844



845

TUCKER Accessory Purchase Order	
In consideration of \$....., the receipt of which is hereby acknowledged, the undersigned dealer sells and agrees to deliver to the undersigned purchaser one group of automobile accessories as indicated below:	
PLASTIC GROUP NO. 1	TOP GRAIN COVHIDE GROUP NO. 4
One (1) Man's Two-Seater..... \$ 25.00	One (1) Man's Two-Seater..... \$ 40.00
One (1) Man's Companion Case..... 25.00	One (1) Man's Companion Case..... 40.00
One (1) Approved Tucker Automobile Radio..... 95.00	One (1) Approved Tucker Automobile Radio..... 95.00
One (1) Approved Set of Tucker "Road"..... 69.00	One (1) Approved Set of Tucker "Road"..... 69.00
Best Automobile Seat Covers..... 1012.00	Best Automobile Seat Covers..... 1012.00
Group Price..... \$ 1130.00	Group Price..... \$ 1130.00
Federal Excise Tax..... \$ 113.00	Federal Excise Tax..... \$ 113.00
PLASTIC GROUP NO. 2	TOP GRAIN COVHIDE GROUP NO. 5
One (1) Woman's Wardrobe Case..... \$ 25.00	One (1) Woman's Wardrobe Case..... \$ 40.00
One (1) Woman's Companion Case..... 25.00	One (1) Woman's Companion Case..... 40.00
One (1) Approved Tucker Automobile Radio..... 95.00	One (1) Approved Tucker Automobile Radio..... 95.00
One (1) Approved Set of Tucker "Road"..... 69.00	One (1) Approved Set of Tucker "Road"..... 69.00
Best Automobile Seat Covers..... 1012.00	Best Automobile Seat Covers..... 1012.00
Group Price..... \$ 1130.00	Group Price..... \$ 1130.00
Federal Excise Tax..... \$ 113.00	Federal Excise Tax..... \$ 113.00
PLASTIC GROUP NO. 3	TOP GRAIN COVHIDE GROUP NO. 6
One (1) Man's Two-Seater..... \$ 25.00	One (1) Man's Two-Seater..... \$ 40.00
One (1) Woman's Wardrobe Case..... 25.00	One (1) Woman's Wardrobe Case..... 40.00
One (1) Approved Tucker Automobile Radio..... 95.00	One (1) Approved Tucker Automobile Radio..... 95.00
One (1) Approved Set of Tucker "Road"..... 69.00	One (1) Approved Set of Tucker "Road"..... 69.00
Best Automobile Seat Covers..... 1012.00	Best Automobile Seat Covers..... 1012.00
Group Price..... \$ 1130.00	Group Price..... \$ 1130.00
Federal Excise Tax..... \$ 113.00	Federal Excise Tax..... \$ 113.00
Indicate here..... the Accessory Group Number selected.	

846

San Francisco Examiner
FRIDAY, AUGUST 27, 1948
BUSINESS—FINANCE
Edited by Charles H. Peter

Tucker Corp'n. Backers Told of New Finance Tie
Parity With Other Auto Firms Claim

Consumers' Price Index Record Set
NEW YORK, Aug. 26 (AP)—The Consumers' Price Index for August 1948 set a new record, rising to 148.4 from 147.8 in July, according to the Bureau of Labor Statistics.

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

847

"...By August, 1948, Tucker had promoted more than \$26,000,000. By May of this year there remained in cash, according to Federal Bankruptcy trustees, exactly \$69,035. What had Tucker accomplished with the money? The trustees reported he didn't even have 'the necessary assembly lines and...necessary...tools, dies and other similar accessories...to manufacture a car'..."

Lester Velie
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

Tucker Plans L. A. Plant For Parts Production

LOS ANGELES, July 13 (UP)—Preston Tucker, automobile designer and promoter, today announced he was negotiating for an air-frame plant here to be used in assembling the rear-engined Tucker car.

Tucker said he expected to be able to begin production of the cars in the wartime Dodge plant in Chicago by October. He added that the company has set a goal of 1000 cars a day by Jan. 1.

848

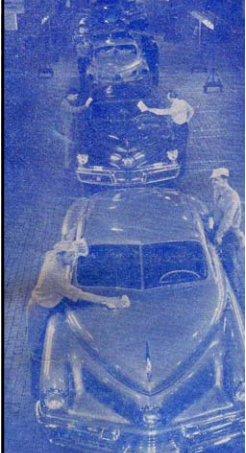
Tucker Plans L. A. Plant For Parts Production

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Tucker said he expected to be able to begin production of the cars in the wartime Dodge plant in Chicago by October. He added that the company has set a goal of 1000 cars a day by Jan. 1.

Of Questionable Quality

849



"...For the vanished millions, Tucker could chiefly show 49 experimental, handmade model cars. Described by the SEC as of 'questionable quality,' the Tucker car, according to Tucker's own engineers, would need months of additional engineering and \$50,000,000 additional money before it could be put into production..."

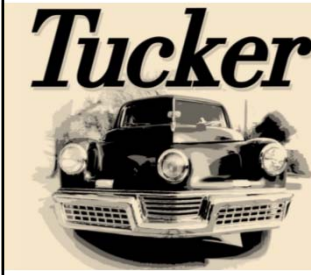
Lester Velie
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

850

P. Tommy Tucker

851

Tucker



"...This is the story of P. Tommy Tucker, his car, and his stranger-than-Mother-Goose adventures in promoting and building an industrial empire..."

Lester Velie
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

852

Cast of Characters

853

“...In its cast of characters there appear an ex-convict who had served three and one half years for bank embezzlement, a provocative countess, a badcheck artist and press agents who served as gobetweens in clandestine pay-off deals. Playing a role, too, are obliging government officials who, above and beyond the call of duty, held a \$171,000,000 plant for Tucker even after he had given as a deposit a \$150,000 check for which there was less than \$3,000 in the bank - and then, when Tucker had the plant, went on his pay roll. The cast is adorned by ex-Republican committeewoman Mrs. Dudley C. Hay, whose husband, no engineer, received \$17,000 for Tucker appraisal services. In the cast are advertising experts who built up Tucker as a ‘recognized automotive engineer,’ although, as the SEC later found, he had never finished high school, had flunked mechanical arts, and had qualifications that could be summed up as those ‘of an ordinary garage mechanic’...”

Lester Velle
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

854

TUCKER COMPANY - EXPENSE SUMMARY			
Trip Expenses	3,379.87	(Approximation of figure previously submitted on expense report to Tucker Corporation prior to Mar. 1, 1949)	
Payroll	300.00	Byron Stone	Negotiations relative to sale of 10-second battery, Inc. for financing.
Payroll	1,100.00	Robert Nelson	Negotiations for refinancing program started in November, 1948 for refinancing.
Payroll	100.00	John Bennett	Negotiations for refinancing and sale of 10-second battery, Inc.
Telephone	95.88	WMA-3-0711	Corporate charge for business calls.
Telephone	142.98	WMA-3-0711	Corporate charge for business calls.
Trip Expenses	776.00	Hotel and incidental expenses	Refinancing negotiations
D-8, Syracuse-N.Y.			
Trip Expenses	840.33	Hotel and incidental expenses	Refinancing negotiations
N.Y.			
Washington, D.C.	21.00	William R. Bates	
Palin Beach, Pa.	200.00	William R. Bates	
	1,145.76	Childs' expenses	
Trip Expenses	400.00	Hotel and incidental expenses	V.I.A. and refinancing negotiations
Washington, D.C.			
Trip Expenses	180.00	Plane fare	Refinancing negotiations
Washington, D.C.			
Trip Expenses	7.00	Plane fare	To secure date on 10-second battery & test for Tucker Corp. compliance with
Detroit, Mich.			
	7.00	Gas fare	expenses
	1.00	Trip	
Trip Expenses	683.00	Hotel, plane fare, incidental	To secure financing.
Cleveland, Ohio			
Trip Expenses	17.54	Plane fare	
Wash., D.C.			
	5.00	Gas fare	
	5.00	Trip	
Trip Expenses	350.00	Hotel and incidental expenses	Refinancing program.
Washington, D.C.			
Trip Expenses	40.00	Plane fare	Refinancing program.
Washington, D.C.			

“...Heading it all up is the boyish, grinning P.T. Tucker himself, a bewildering combination of P.T. Barnum, Huck Finn, Jimmy Walker and Baron Munchausen, with a talent for telling stories that people believed and a genius for spending money. Investors could have learned about some of Tucker's ways with money before they entrusted him with their hard cash...”

Lester Velle
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

855

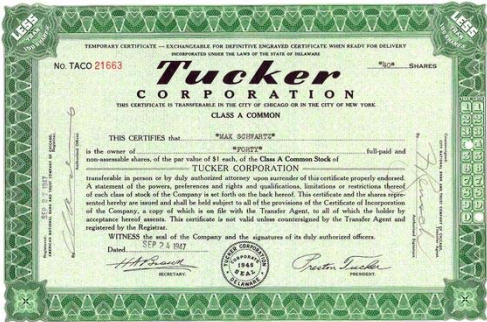
Tucker's Secrets

856

“...The SEC had spelled out those ways for all the world to see. Under the law the SEC does not, as is generally supposed, either approve or blackball stock issues. All it can do is make the promoter bare his secrets. These are published in a prospectus, which the investor is urged to read before he plunks his money down. Here are some tidbits that the SEC extracted from Tucker in lengthy hearings that were made public in June, 1947, before the stock went on sale...”

Lester Velle
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

857



858

"...He paid no cash into his own promotion (he told Chicago newspapers he put in more than \$1,000,000). Lacking the \$100,000 he needed to buy founder's stock didn't daunt him. Here's how Tucker managed: He submitted an expense account covering 333 days, charging, according to SEC, \$40 per diem, exclusive of hotel bills and transportation charges - 'to cover taxis, tickets, limousines, racing tickets, etc.' For this and other claims on the Tucker Corporation, he received \$100,000. This he turned over for stock which gave him control of the company. And a \$15,000 check, paid for a Tucker franchise and supposedly deposited in a Tucker Corporation escrow account, was found in Tucker's personal bank account instead. Discovered, he returned the money..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

859

In the Flesh

860

"...Tucker, in the flesh, is as revealing as the SEC's disclosures about him. 'Come up to my apartment and let's get acquainted,' he told me in Chicago. 'I'll pick you up in my Tucker.' Unshaved, wearing a leather hunting jacket, and pouring his troubles out in barnyard Anglo-Saxon, Tucker looked somewhat less than the suave and forceful promoter as he gunned his pearl gray Tucker car along Lake Michigan's shore. A federal court had cut off his \$50,000-a-year salary and even more lavish expense account and barred him from the silent and cavernous Tucker plant. He faced possible indictment on mailfraud charges..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

861



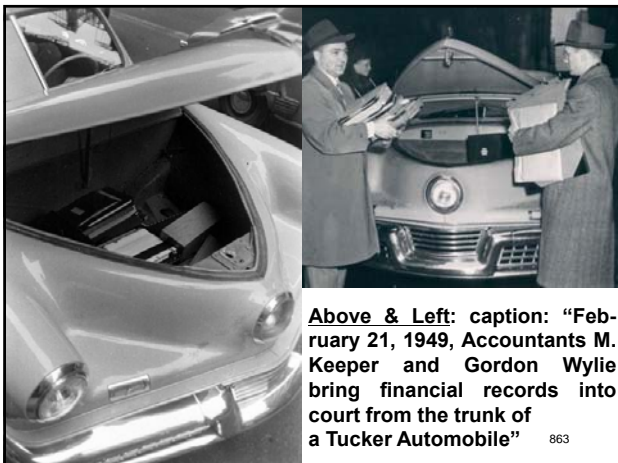
"...The U.S. Tax Court was after him with tax-fraud charges, and he was peppered with many lawsuits. His small, thin-lipped mouth and wideopen, disarming eyes showed the strain..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

Left T&B: caption: "Preston Tucker arrives at the Federal Courthouse in Chicago with his attorney Frank McAdams at his side"

862



Above & Left: caption: "February 21, 1949, Accountants M. Keeper and Gordon Wylie bring financial records into court from the trunk of a Tucker Automobile"

863



864

The Most Investigated S.O.B.

865

"...I've got the number one demand car in America," Tucker said, patting the telltale preselective gearshift rod which revealed the car to be equipped with a modified Cord transmission. The car was the 29th of the Tuckers to be made by hand. Powered by its costly airplane-type engine (the original engine in the world premiere Tin Goose model had been quickly scrapped as inadequate)..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

866



"...the Tucker shot by other automobiles on the road. 'Why, I can accelerate so unprintably fast,' Tucker said, 'nobody can catch me. That's why Detroit's afraid of me, and the invisible forces of government are out to stop me. I'm the most investigated S.O.B. in the whole unprintable world'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

867



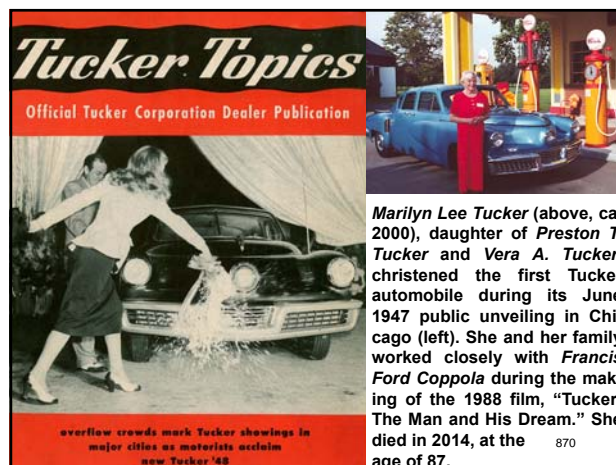
868

"...Tucker led the way into his eight room. Lake Shore Drive apartment which commands a breathtaking view of Lake Michigan and Chicago's gold coast. He introduced his wife, Vera, a worried-looking woman of about forty, and his youngest son, eighteen-year-old Johnny. Married at seventeen. Tucker has five children, three of them married..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

869



Marilyn Lee Tucker (above, ca. 2000), daughter of Preston T. Tucker and Vera A. Tucker, christened the first Tucker automobile during its June 1947 public unveiling in Chicago (left). She and her family worked closely with Francis Ford Coppola during the making of the 1988 film, "Tucker: The Man and His Dream." She died in 2014, at the age of 87.

870



Above: caption: "Tucker Unveiling: Showing Marilyn Lee, her parents Vera and Preston Tucker at the public unveiling of the very first Tucker on June 19, 1947"

871

Luxury on the Cheap

872

"...He broke out a bottle of rye and, glass in hand, showed his apartment. It presented a picture rich in Louis XV and Chinese antiques, luxurious in walnut and ebony panelings and silk hangings. Someone obviously had lavished a fortune on these. But now the hangings were frayed, the rugs scuffed. 'Cost the people before me \$750,000 to fix this up,' Tucker said. 'Got it practically for nothing. Forty thousand for the apartment - it's co-operative - and \$28,000 for the furnishings.' He pointed to a twelve-foot-long dining-room table. 'Real, Genoa silver marble,' he said. 'Look at the gold-plated legs. Cost \$60,000.' 'Some dining-room ceiling!' Tucker continued. 'Real silver leaf.' In the master bedroom, decorated in red and black, were two rare jade lamps. 'We call this our passion parlor,' said Tucker..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

873

Caught Short

874

"...Back in the 20- by 30-foot living room. Tucker scuffed the Austrian silk and wool tufted rug. 'I tell you this joint is fabulous,' he said. 'The most expensive apartment in the world.' But he frowned. He had been caught short, he said. Planning to sell the furnishings and the apartment, he had called in an appraiser just a few days before. The expert examined the fine French commodes and elegantly tapestried couches and shook his head sadly. 'The people before us were small,' related Tucker, 'so they cut down the legs of these antiques.' He curled his lips in disgust. 'Ain't worth a four-letter word..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

875

How Did I Get Here?

876

"A Detroit motorcycle policeman during prohibition, a lifelong salesman and a motorhead since the first car he saw scared his grandfather's horses in 1906, Preston Tucker lived life at full speed. One of his first jobs was as a delivery boy at Cadillac, which he reasoned he could do faster on roller skates. His heroes were drivers at Indianapolis, and designer Harry Miller became a close friend. In the 1930s, Tucker sold every major brand of American automobile - and he sold lots of them..."

Chicagotribune.com, February 1, 2011

877



878



"...He slid into a needle-point, museum piece of an easy chair and ran his hand through his thinning, silky hair. A straight, thin nose testified to a once handsome face. Under a chin that receded slightly, emerging jowls bespoke good living and approaching middle age. 'How in the hell did I ever get here?' he mused. 'Me, a plow jockey from the back 40 acres.' He expressed his bitterness in a soft, pleasant voice, punctuating his remarks with an occasional, boyish laugh..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

Left: caption: "Preston Tucker, depicted in a 1948 issue of 'Tucker Topics'"

879

Basically Honest

880

"...The fraud charges of the SEC? 'A pack of fantastic lies,' said Tucker. 'I didn't steal a dime. I'm basically honest. If I caught the boys doing something wrong, I'd saw their heads off. Why, I've just had to sell my wife's Cadillac and my boy's Pontiac to get money to eat. 'Starting a business is a Herculean task. In the summer of '47, I flew 400,000 miles to show my car (the non-reversing Tin Goose already described) to dealers and investors. It costs money to entertain dealers. I didn't want those unprintable parties (one shindig, the World Premiere and the party that followed, cost \$60,000)..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

881



882

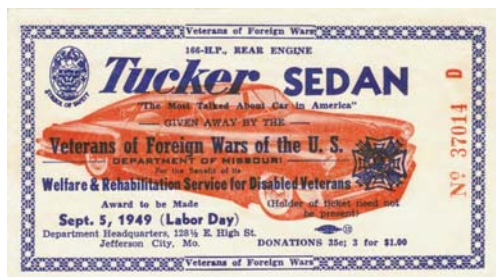
The Spirit of America

883

"... 'The spirit of America is behind my car so bad - it's pitiful.' He fished in his pockets and drew out a letter from an ex-Wac. To it was pinned a \$5 bill. 'I'm so interested in seeing your wonderful cars being made and sold just in a steady line,' the letter read. 'I'll keep \$20 on hand for you to help tide you over a rough spot.' Contributions like these, Tucker explained, poured in daily 'to use as I see fit in my fight for American enterprise.' The contributions, including a \$2,000 check from an aged Chicago couple, exceeded \$200,000. 'The lawyers told me to send it all back. I haven't kept a cent. Hell, that's a big chunk of dough!' he said. 'If somebody wants to give me a buck, I ought to be able to keep it, shouldn't I?...'"

Lester Velie
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

884



885

All You Need is Dough

886



"... 'The big fellows haven't licked me yet. All I need is dough. If I could raise ten million, the RFC would match it. Money could solve a lot of problems. We've got one line set. Got our jigs and fixtures. I can build five cars next week. I'll dump the facts at 'em so fast! You watch what I'll pull'..."

Lester Velie
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

887

Watching Tucker

888

"...Watching what Tucker will pull has occupied a constantly widening circle of people ever since the Tucker promotion got under way in 1944. In that year Tucker, then little known to Detroit and Washington, started his snowball rolling by getting himself some colored drawings of his coming 'Tucker Torpedo' and by teaming up with a co-promoter. Prepared by a Detroit artist, the drawings depicted a teardrop creation promising some startling firsts: front fenders that would turn with the wheels; the Cyclops eye; and a driver's seat located in the center because, Tucker said, racing car builders had found that at high speeds a car can't be controlled from the sides (when car builders sought to reduce these drawings to blueprints they found the car, as drawn, had room for only one motorist in front and one in back)..."

Lester Velie
RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

889

assure Perfect Motoring in the Torpedo

Where else but in the Tucker Torpedo is the rubber cushion which only the automobile can provide? Where else the front fenders from Birmingham Iron, steel, aluminum and steel? Where else the car can be as precise as a machine? Where else in the high-speed race—the race of new design, that makes not only the clutch but the transmission, drive shaft and differential obsolete?

Where else but in the Tucker Torpedo is there the light weight—yet strength and strength—made the standard of different generations. Where but in the Tucker Torpedo, is the complete solution and parts of mind that come from knowing you have the rubber tracks and finger-clip control at all times? Where else but in the Torpedo, is there the skill of a man and setting into the ground and into the air for the driver and passenger alike.

Only by drawing and building them and making with industriously different principles of drawing and drawing are drawings... only by making the most and best knowledge of technology and mechanical and physics. Tucker design and build such safety, economy, comfort, performance and more experience into this distinguished new automobile... the car has been built to perfection.

SAFETY
The body has with wheel and riding is designed like the body of a fighting plane, integral with the chassis. The glass "lightning" without sacrificing strength and a lower center of gravity for road stability at any speed. The big Torpedo is used, and in front of the driver's compartment is a most crash-proof front with a new look from the driver's view.

The overall safety glass windshield provides full vision, and the close range of the hood design allows the driver to see a clear view of the road immediately ahead. The suspension and other instruments are in plain sight, not hidden behind the steering wheel or gears.

ECONOMY

Up to 18 miles per gallon of gasoline is expected of the engine, designed to obtain maximum efficiency from ordinary motor fuels. Large energy reserve departments will not be needed with "torpedo service" direct from the battery.



There are no gears to shift in the Torpedo. Hydraulic torque converters transmit power directly to your wheels for instant safety as well as economy. The driver can have both, both as he wheels, eliminating the waste of many accidents. On the economy side are lower weight, lower operating costs and the new frictionless drive shaft which prevents vibrations.

Drivers will carry spare engines to match the replacement, the engine sections are exchanged easily, with engines are small or small as the battery. Electrical connections, from, from, but and hydraulic lines from through a single slip-on type connector that will be connected with a single operation.

And the engine, located in the center of the body, can be replaced in 15 minutes by a competent mechanic, with standard tools. This only means service operations required will be halved, and perhaps eventually changing the electrical system.

COMFORT
There's room and air to clear seats when parked, and stand into the roof as passengers can get in and out without anything. Floor space in the Torpedo is limited, is undoubtedly the most comfortable for the driver, and the passenger, being in the front compartment and the transmission case. The only controls on the floor are the foot controls and pedals.

The Torpedo compartment is in front under the hood for quick access and maximum shock strength. An exhaust outlet opens over the right side of the front fender and back fender.

STYLE
Because the Tucker Torpedo avoids the competition that comes with Birmingham design, new and graceful lines distinguish its surroundings. Lower center of gravity gives it the look of a modern car, but without sacrificing strength and power for the driver. Today the Torpedo has not a single line that will not be found in steel, and that will give every the style and equipment of driving its nearest looking car to America.

890

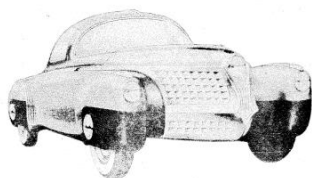


Fig. 1

INVENTOR:
GEORGE S. LAWSON
BY: William Velie
ATTORNEY

June 1, 1948
Filed Jan. 31, 1947

G. S. LAWSON
ATTORNEY

Dec. 14, 1953
2 Sheets-Sheet 1

891



892

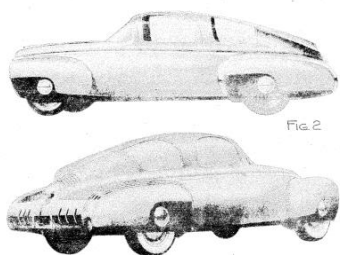


Fig. 2

INVENTOR:
GEORGE S. LAWSON
BY: William Velie
ATTORNEY

June 1, 1948
Filed Jan. 31, 1947

G. S. LAWSON
ATTORNEY

Dec. 14, 1953
2 Sheets-Sheet 2

Fig. 3

893



894

The Company He Kept

895

"...Tucker's new co-promoter was A.H. Karatz, a former Minneapolis lawyer who had served a three-and-one-half year term in the Illinois State penitentiary for a Chicago bank swindle which had also involved 'Long Count' Dave Barry, referee of the second Dempsey-Tunney fight. Barry appealed and went free but not Karatz..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

896

"...Karatz struck it off well with Tucker and was soon so deep in Tucker's car promotion that when the state attorney's office inquired into the ex-convict's association with Tucker Corporation, it found that 'Karatz knows more about Tucker Corporation than Tucker himself.' Karatz was the boy who saw the bankers. He led his younger associate to Floyd B. Cerf, a Chicago broker whose modest, \$87,500 company had engaged only in bush-league financial deals up to this point. Tucker displayed his portfolio of car drawings. 'I want to raise \$20,000,000 to produce a car,' he said. 'Have you got a prototype model of a car?' Cerf asked. 'No.' 'A plant to build the car in?' 'No.' 'We can't finance just an idea,' said Cerf. 'We must have a plant, and an organization and the semblance of a product. If that's what it takes, I'll go out and get it,' said Tucker..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

897


Descended From Champions

898

Now it can be told...

HOW 15 YEARS OF TESTING PRODUCED THE SURPRISE CAR OF THE YEAR

Here's the exciting story of America's newest and coolest Motor Car



THE NEW TUCKER...YEARS AHEAD!

Tucker 48

...This was in the fall of 1945, a few months before he announced the birth of the 'Tucker Torpedo...descended from champions of the speedway...with engineering principles proved by 15 years of rigid tests..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine. Tucker's print advertising claimed that the car was the product of "15 Years of Testing..." The "15 Years" came from the fact that Preston Tucker claimed he'd been considering that he might like to start up a car company for something like 15 years, more or less. By his way of thinking, that was close enough to the facts.

899

Step into a New Automotive Age in the Rear Engine Tucker

A FEW OF MANY NEW

Engineering Features

A FEW OF MANY NEW

Safety Features

A Word To Women Who Drive Or Ride

900



901

"...The announcement to the car-hungry public came in January, 1946. A freelance newspaperman, Charles Pearson, who later went on the Tucker pay roll at \$15,000 a year and received a block of Tucker Corporation stock, wrote in the now defunct magazine, *Pic*: 'The first super auto job to get off the drawing board into the production stage is being put together at Detroit...It is the Tucker Torpedo...rear-engined car...aimed to sell for around \$1,000...The Tucker Torpedo is the first serious threat to the supremacy of established automobile manufacturers and...may make models now in production obsolete almost overnight. Preston Thomas Tucker, designer of the Torpedo...has a recognized place in automotive engineering...As an associate of the late Harry Miller, builder of world-famous racing cars, he had a part in the design of speed creations that won 14 out of 16 races on the Indianapolis oval'..."

Lester Velle

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

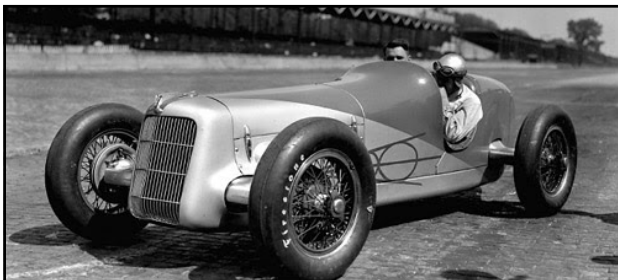
902



903

An Interested Reader

904



"...One interested reader was Mrs. Harry A. Miller, widow of the racing car designer. What she read made her seek a lawyer. Tucker, she told the attorney, had never had any part in the design of any of the Miller cars. Once, in 1935, he had promoted a deal with the Ford Motor Company for the conversion, by Miller, of ten Ford V-8 cars into racers. In this short-lived and ill-fated deal (the racers got nowhere at Indianapolis) Tucker served only as a business agent. He took no hand at all in the engineering and construction work on the cars, she said..."

Lester Velle

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

905

Fight Money

906

"...Other readers of the magazine article, just as interested as Mrs. Miller but less critical, swamped the publication with urgent inquiries. 'When can we buy a Tucker?' wrote would-be customers, including G.I.s from overseas. 'How can I get a dealership?' 'Is there stock for sale?' Spurred by this overwhelming reaction, Tucker and Karatz formed a syndicate in Detroit to raise 'fight money' for promotion. To these associates Tucker displayed what he did have in the way of a car to date - a cylinder block from an old Miller racing 'Special,' from which the Miller name had been ground out and the Tucker name etched in. He also had what he described as a torque converter, which engineers said could just about power a scooter. And he had some beautiful drawings..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

907

Eyes on the Prize

908

"...The syndicate soon broke up. Undaunted, Tucker and Karatz set out to get a plant. In Washington, Tucker aimed at nothing less than the giant B-29 engine establishment in southwest Chicago. Consisting of 14 major buildings covering 6,000,000 square feet, this had been built by the government for \$71,000,000 and stocked with \$100,000,000 worth of machinery. Many competitors sought this plum, including a group of businessmen headed by Brigadier General Patrick Hurley. But Tucker got the lease. How he got it was described by Senator Homer Ferguson (Republican, Mich.) as 'one of the most flagrant cases of maladministration and mismanagement in the handling of our plant disposal program'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

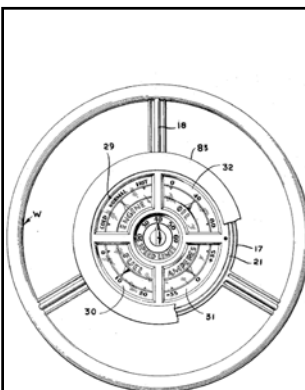
909

"...Here is the story as Senate investigators reconstructed it: Agreeing to pay a \$1,000,000 rental deposit in four payments, Tucker first gave a \$25,000 personal check. The WAA never cashed it. Then he sent a check for \$150,000 which the WAA misplaced. When Tucker sent a replacement check, WAA official Oscar H. Beasley inquired at Tucker's bank and found that Tucker had less than \$3,000 on deposit there. But Tucker got the plant anyway, under a new agreement which gave him time to raise money..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

910



"...Beasley (who later received \$1,000 monthly payments from the Tucker Corporation) and other WAA officials showed as little concern for Tucker's financial status as they did curiosity about his character or his past. Had they gone to the U.S. Patent Office, they would have found (in 1946) that no automobile invention patents had ever been issued to Tucker, 'the automotive inventor'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

Left: caption: "Patent for a steering wheel mounted instrument that Preston Tucker filed March 24, 1947"

911

"...Had they gone to the United States Tax Court, they would have found Tucker accused of filing fraudulent income tax returns for 1942, 1943 and 1944. The Internal Revenue Commissioner charged that Tucker had failed to account for savings-bank deposits of \$163,000 and owed the government \$93,300 in unpaid taxes and penalties. One protest was raised. The then housing expeditor, Wilson W. Wyatt, sought to have the government break Tucker's agreement and turn the plant over to a prefabricated housing manufacturer..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine. Wilson Wyatt, head of the *National Housing Agency* (NHA), ordered the *War Assets Administration* (WAA) to cancel Tucker's lease and turn the plant over to the *Lustron Corporation* to build pre-fab houses.

912

"...Tucker's attorneys, the famed Washington firm of Davies Richberg Beebe Busick & Richardson, called on additional help. They asked William Boyle, now executive vice-chairman of the Democratic National Committee, to help write a legal opinion. In Boyle's opinion the government could not legally break the agreement. Tucker held on to his plant. And so, in the summer of 1946, Tucker had his plant..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

913

Tucker Given Extended Time

WASHINGTON, June 26. (UP)—The war assets administration Thursday granted the Tucker Corp. four months more time in which to obtain money to finance a lease of the surplus Dodge-Chrysler plant at Chicago.

The Tucker concern, building a new automobile called the Tucker Torpedo, was to have produced the necessary financial backing by July 1. The extension will postpone final financing of the lease until Nov. 1.

Announcement by WAA of the new arrangements followed closely approval by the securities and exchange commission in Philadelphia of the issuance of \$20,000,000 worth of Tucker stock to finance the new corporation.

In a 25-page opinion, the SEC stressed the fact that it was in no way "passing on the merit or lack of merit" of the company's securities. The commission cited the expensive publicity campaign concerning the corporation and its plans to manufacture a radically new rear-engine auto.

"We cannot ignore the impact of this misleading information contained in past publicity concerning the corporation and its officials on the mind of the investing public," the opinion said.

Preston Tucker may have been an unfortunate pawn, caught in the middle of a bureaucratic war between the NHA and the WAA. While the battle raged, franchise sales fell, stock issues were delayed and Tucker's reputation was severely damaged. In the end, he kept the Chicago plant, but the episode made him some real enemies in Washington, including Michigan Senator *Homer Ferguson*. But Tucker did find some allies. The WAA extended Tucker's \$15 million cash deadline to July 1, 1947 and Nevada Senator *George Malone* began his own investigation of the SEC. Tucker Corp. stock finally cleared for sale on July 15, 1947.

914

Tucker Hopes To Have Cars Out This Fall

CHICAGO, June 27 (INS).—The production program of the Tucker Corporation, Chicago's new rear-drive auto manufacturer, was being driven to the utmost today with the goal of having Tucker Torpedoes in dealers' show rooms by late Fall.

This statement was issued by Preston T. Tucker, president of the corporation, who expressed pleasure at the Security Exchange Commission's approval of a \$20,000,000 Tucker common stock issue.

He also expressed his gratitude to the War Assets Administration for a four-month extension in which to secure the financing necessary to hold the lease on the huge Dodge-Chrysler plant in Chicago.

Tucker Names Date

CHICAGO, Sept. 3 (UP) — The first Tucker '48s will roll off the assembly lines next month and will be placed on sale at less than \$2000, FOB Chicago, Preston Tucker, president of the Tucker Automobile company, said Wednesday.

INSPECTS TORPEDO

L. E. Shealy of Charlotte, who is the authorized **Tucker Torpedo** automobile dealer in Gastonia, is in Chicago to inspect the first cars off the company's assembly lines. He expects to open the local agency some time this summer.

915

"...Claims of backdoor skulduggery riled a number of politicians in Washington who set out to get Tucker. Broadcaster Drew Pearson weighed in with bribery accusations against Tucker and the stock dropped from \$5 to \$3. Reuther pointed out that no Tucker plant meant no jobs for UAW workers and the decision was left to President Truman. Truman went on vacation without making a decision and Tucker kept his plant..."

Chicagotribune.com, February 1, 2011

916

Tucker's People

"...Tucker's people at this time were a mixed group. Shutting with him between Chicago, Detroit and Washington were Karatz and another contact man described in a pamphlet of the William J. Burns International Detective Agency as a 'check passer and confidence man' wanted by police of two cities. In his entourage also was a Countess Consuela Talalla, of piquant accent and vivacious manner, who had met Tucker in a New York night club. Divorced later, she was seen much with Tucker and once sought to intervene with Chicago police when they jailed another Tucker aide for passing a bad check..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

918

In fact, *Preston Tucker* had assembled a group of leaders for the *Tucker Corporation* that read like a "Who's Who" of the automotive industry to help him build his dream car:

- *Fred Rockelman* - Tucker VP and Sales Director (Formerly President of *Plymouth*)
- *Hanson Brown* - Executive VP (formerly VP for GM)
- *K.E. Lyman* - Development Engineer (formerly of *Bendix Corporation* and *Borg-Warner*)
- *Ben Parsons* - Tucker Engineering VP and Chief Engineer (an international fuel injection expert)
- *Lee S. Treeese* - VP of Manufacturing (formerly a FMC executive)
- *Herbert Morley* - Plant Manager (formerly Borg-Warner plant manager)
- *Robert Pierce* - VP and Treasurer (formerly Secretary of *Briggs Manufacturing*)

919

Selling the Sizzle

920

"Don't sell the steak...sell the sizzle"
Salemanship Philosophy

921

"...With a corporation formed, executives hired and a plant rented, all Tucker now needed was money, \$20,000,000 worth, a tidy sum to get together, but not for a man who had already accomplished so much with so little. His first idea: sell dealerships. Tucker and his associates combed the lists of those who had made inquiries after the initial publicity blast. Approached, the prospects eagerly parted with their money, some plunking down as much as \$50,000 apiece. Soon the Tucker Corporation had several hundred thousand dollars of working capital. But more money was needed..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine. The fledgling company needed immediate cash. Tucker soon discovered that support from businessmen who could underwrite such a venture meant sacrificing some, if not all, control of his company. To Tucker, this was intolerable so he conceived of a clever alternative. He began selling dealer franchises and soon raised \$6 million dollars to be held in escrow until his car was delivered. The franchises attracted the attention of the *Securities and Exchange Commission* (SEC) and in September 1946, it began an investigation - the first of a series that would be on-going for the next three years.

922

Exit Karatz

923

"...Tucker and Karatz went back to broker Cerf. Bankers usually investigate propositions patiently, turning accountants and engineers loose on them, sometimes for months. But Cerf needed only one fruitful day with Tucker, from 4:00 P.M. until 4:30 A.M., to make a deal. In longhand, Karatz wrote out an agreement. Cerf undertook to sell \$20,000,000 worth of Tucker shares at \$5 apiece. This step taken. Tucker found Karatz' convict record embarrassing. Exit Karatz..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine. The dealership agreements were rewritten to SEC satisfaction and the franchise sales proceeded. In October 1946, Tucker began another proposal; a \$20 million dollar stock issue (contingent upon a completed prototype and clearance by the SEC).

924

The Deal

925

"...Then, as all security-selling promoters must. Tucker had to go to the SEC. Here he found one government agency that asks questions. Piqued by the facts Tucker laid before it in his registration statement, the SEC wanted to know more: Why did he hide the role ex-convict Karatz had played in promoting the venture? Why didn't he mention the clandestine deal by which he sought to pay Karatz off?..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

926

"...The deal; Tucker Corporation paid James E. Tripp, California press agent, \$3,500 monthly. Tripp kept \$1,500 for services and paid the \$2,000 balance to Karatz. When the payments ceased after three months, Karatz sued Tucker for \$900,000..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

927

Caveat Emptor

928

"...Other undisclosed facts: The Tucker car had not been completely proved. The pilot model needed 'extensive testing and might require material changes in engineering.' Tucker omitted so many facts and misstated so many others that the SEC issued a special warning to investors: The way Tucker Corporation money had been used 'raises grave questions as to whether a proper stewardship of corporate funds has been maintained.' The SEC gave this warning to the newspapers and sent it to 4,000 brokers - many of whom were to handle Tucker stock. But the promoter's reputation was safe. Who ever reads the fine print in SEC prospectuses or the single-spaced SEC opinions?..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

929

California (and/or) Bust

930

[illegible]

Back in Chicago...

932

"...Back in Chicago. Tucker ordered his advertising agency to describe in doublespread ads published in the nation's leading magazines, 'The Success Story of The Year - How Fifteen Years of Testing Produced The First Completely New Car in Fifty Years.' Out in the plant, engineers did a double-take when they read the implication that problems they hadn't even tackled yet were solved. 'We're still flubbing around with the most primary and elemental questions of basic design,' Engineer Robert D. Walder protested to Tucker executives..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

933

A Hope and a Prayer

934

“...D. McCall White, the car designer called in by Tucker, took a worried look around the plant then went back to his hotel room. ‘I was so at my wits’ end at the chaos I found,’ he later related, ‘that I got down on my knees and prayed for guidance. ‘Tucker didn’t have a tested car of a sensational character,’ White told the SEC. ‘He had a bundle of untested, unproved and highly questionable engineering ideas in an early and experimental stale of development.’ Said Tucker’s master mechanic, William Stampfli, ‘I couldn’t even get blueprints, although I tried for four months’...”

Lester Velje

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

935

From the Outside In

936

"...The first thing Tucker had to do was get an adequate engine and transmission (he also lacked the disc brakes, torque converters and suspensions he had advertised). Car producers usually design the engine and chassis first, then build their car around it..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

937

Barnstorming

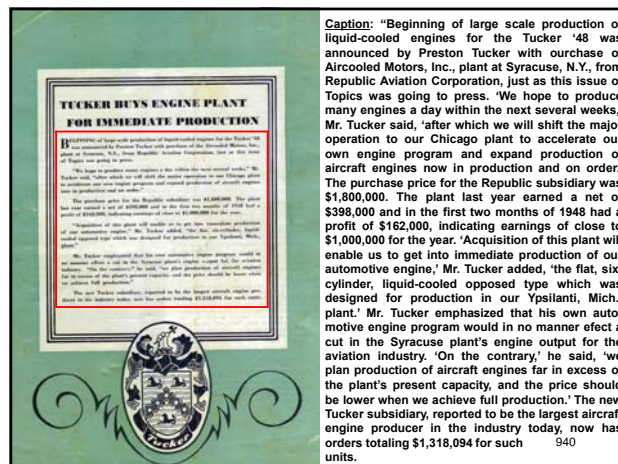
938

"...But Tucker, starting with a body design, found, when he failed to develop his own engine, that only two companies in all America made power plants that would fit the rear space in the Tucker car. He purchased three Franklin air-cooled airplane engines and sent them to a machine shop, nominally owned by his mother but in fact controlled by himself. Known as the Ypsilanti Machine and Tool Company, and located in part in a barn in back of the Ypsilanti, Michigan, home of Tucker's mother, the shop began to play an important role in Tucker Corporation affairs. The shop's assignment: to convert an air-cooled airplane engine into a water-cooled automobile engine..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

939



Caption: "Beginning of large scale production of liquid-cooled engines for the Tucker '48 was announced by Preston Tucker with purchase of Aircooled Motors, Inc., plant at Syracuse, N.Y., from Republic Aviation Corporation, just as this issue of Topics was going to press. 'We hope to produce many engines a day within the next several weeks,' Mr. Tucker said, 'after which we will shift the major operation to our Chicago plant to accelerate our own engine program and expand production of aircraft engines now in production and on order.' The purchase price for the Republic subsidiary was \$1,800,000. The plant last year earned a net of \$398,000 and in the first two months of 1948 had a profit of \$162,000, indicating earnings of close to \$1,000,000 for the year. 'Acquisition of this plant will enable us to get into immediate production of our automotive engine,' Mr. Tucker added, 'the flat, six-cylinder, liquid-cooled opposed type which was designed for production in our Ypsilanti, Mich., plant.' Mr. Tucker emphasized that his own automotive engine program would in no manner effect a cut in the Syracuse plant's engine output for the aviation industry. 'On the contrary,' he said, 'we plan production of aircraft engines far in excess of the plant's present capacity, and the price should be lower when we achieve full production.' The new Tucker subsidiary, reported to be the largest aircraft engine producer in the industry today, now has orders totaling \$1,318,094 for such units.

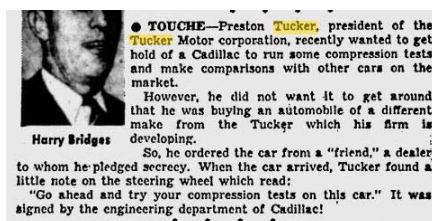
940

"...The shop had neither engineers nor adequate equipment, so Tucker Corporation sent both - and then paid the machine shop \$114,000 for the job. When federal probers looked at the machine shop's books to see how it had arrived at this figure, they found these items: For blankets and household expenses to Mrs. Holmes (Tucker's mother), \$50. For Cord auto parts, \$300. To the family's machine shop Tucker entrusted another vital task (in the spring of 1948): the design of a transmission. The corporation paid the shop \$223,105. What it got for its money was 25 reworked Cord transmissions..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

941



Harry Bridges

So, he ordered the car from a "friend," a dealer to whom he pledged secrecy. When the car arrived, Tucker found a little note on the steering wheel which read: "Go ahead and try your compression tests on this car." It was signed by the engineering department of Cadillac!

942

"...Traveling expenses for Tucker's son, Preston, Jr., and for other employees accounted for some of the money. Young Preston scoured Middle Western junk shops for the remains of old Cord cars, from which transmissions were extracted and sent to Ypsilanti. There the Cord parts were reassembled into a stronger transmission for use in the handmade Tucker cars. Built for the 90 horsepower Cord motor, the transmissions occasionally stripped gears when harnessed to the 150 horsepower Tucker..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

943

"...Daniel Leabu scavenged junk yards and used car lots from Detroit to Miami and finally rounded up (anonymously) 22 Cord transmissions. Some were good and others had a few usable parts. Altogether 18 were installed in Tucker cars to get them on the road, and as the new Y-1s were finished, all but four had the Cord transmissions removed and the Y-1s put in. For the new manual job they designed a pre-selector electric-type shift; a short lever on the steering column selected the gear, and the transmission shifted when the clutch was depressed. Actual shifting was done by vacuum...but with the valves actuated by electromagnets. SEC's experts later reported triumphantly that the Cord transmission 'through later tests proved to be utterly inadequate.' This was no secret to Tucker or the men working on it. They knew it was too light for the more powerful Tucker engine before making the first installation, but it would serve the immediate purpose. Leabu said except for a few bolts, washers and miscellaneous items, no parts in the Cord were interchangeable with the Y-1, including the electric-and-vacuum control assemblies. It was a completely new transmission. Yet the Y-1 wasn't entirely satisfactory. Some said the gear angle was wrong and others said the gears were cut from soft iron..."

RE: excerpt from *The Indomitable Tin Goose* by Charles T. Pearson (1960)

944

By the time *Preston Tucker* began building his car, the *Cord* had been out of production for at least a decade, no other manufacturer used the *Lycoming-built* Cord front-wheel-drive transmission and Cord built no more than 3K 810s and 812s. Even without standard rates of attrition, it would have been impossible for Tucker to round up enough Cord transmissions to repurpose for his large-scale production plans. Ultimately, Tucker envisioned an automatic transmission system that used variable-pitch torque converters on either end of the crankshaft to deliver power to the wheels. The variable-pitch vanes in the torque converters would be able to swing past center, enabling reverse, thus eliminating both transmission gears and the differential.

945



Tucker changed his plans during the prototype stage, ordering the use of the *Cord* transmission/s - both as a stopgap measure until the bugs could be worked out of the automatic transmission system and until *Eddie Offutt* could develop the Y-1 in-house manual transmission. Cord authority *Josh Malks* claimed that 23, rather than 18, Tuckers used the unmodified Cord transmission and ascribes the design of the Y-1 to Tucker engineer *Carl H. Scheurmann Jr.*, not *Eddie Offutt*.

Left: caption: "Prototype Tucker automatic transmission"

Right: caption: "Tucker Y-1 transmission"

946

"Because all of the speeds in the Cord transmission were indirect power passed through a set of gears no matter which speed was selected. The resulting friction and heat plagued the original Cord gearboxes. It was in design essentially a slightly lengthened Cord gearbox providing sufficient room for a synchronized first gear. As in the Cord, there were two synchronizer units. In the Cord, one synchro drove second and third gear, and one fourth. In the Tucker, one synchro drive first and second, the other third and fourth. Other modifications included blocker-type synchronizers and a combined interlock switch and neutral switch contained in a large housing on the left side of the shift unit. What remained unchanged were the Cord's bastard gear angles, the long - now even longer - mainshaft, and the brute force interlock to keep the synchros from slipping back to neutral. And it was still shifted by the Cord's Bendix-built electric-vacuum mechanism."

RE: excerpt from *Cord Complete* by *Josh Malks*

947

Originally designed as a three-speed front-wheel-drive manual transmission (in part by Auburn engineer *Harry A. Weaver* and in part by the *Detroit Gear and Machine Company*) the design was compromised when *Cord* added an overdrive gear. A number of built-in flaws in the design of the Cord transmission (ranging from the high helix angle to a mainshaft that was too long and gear teeth that were too narrow), the Cord transmission/s weren't up to the task Tucker assigned them given that they were hardly up to the task in their original application. Auburn engineers could only suggest bronze bushings and adding pressure lubrication. At best, not an ideal choice for a car destined for full production or, at worst, fodder for those who considered *Preston Tucker* a con artist.

948

The Quiz Kids

949

"...Life with Tucker inside the plant was as unconventional as the car's engineering. When his first controller took over in the spring of 1947, the expert found the corporation records comparable to 'a spindle system of record keeping handled by one female employee.' The controller, thirty-two-year-old James D. Stearns, who had left a promising career with General Motors, straightened out the accounts, then hired four engineer-accountants to check and control money spent on engineering work. Dubbed the quiz kids, the engineer-accountants' questions were soon resented by Tucker's aides and they were barred from the departments they sought to investigate. Then they were locked out of the plant altogether..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

950

Tenure With Tucker

951

"...Tenure with Tucker was short. In 18 months he went through four treasurers, the last one a 'hot rod' mechanic with an Indianapolis Speedway background. Locking out an executive was the favored Tucker method for firing aides who had fallen from grace. Sometimes he varied the firing technique. One day he summoned two executives to his office. 'The SEC is after you boys,' he disclosed. 'Maybe you'd better get out of the country till things blow over.' Tucker handed one a check for \$6,000 and urged him to take a company car and drive to Canada. To the other he gave a \$1,000 check and suggested he visit Mexico. 'Let me have your resignations so I can show the SEC you're no longer with me,' he said. When the two men had gone, Tucker called a meeting of other aides. He named one executive and said, 'He's made off with \$6,000 and a company car.' Later, when the two returned, they found themselves locked out..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

952

The Poor Boobs

953

"...Inquisitive, Tucker took to tapping the telephones of his executives and concealing sensitive microphones in their offices. The listening was interesting. From a meeting between Vice-President Fred Rockelman and importunate dealers came this wire recording: 'You say you're sick to your stomachs! (Rockelman talking). Well, I tell you I'm sick to my stomach. Two years - and no cars!' 'I told them, 'I've got you wired for sound all over the place,' Tucker told this writer gleefully. 'They wouldn't believe me. They found out soon enough, though, and started using the nickel phone down the hall. The poor boobs didn't know I had that plugged too..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

954

Promises Promises

955

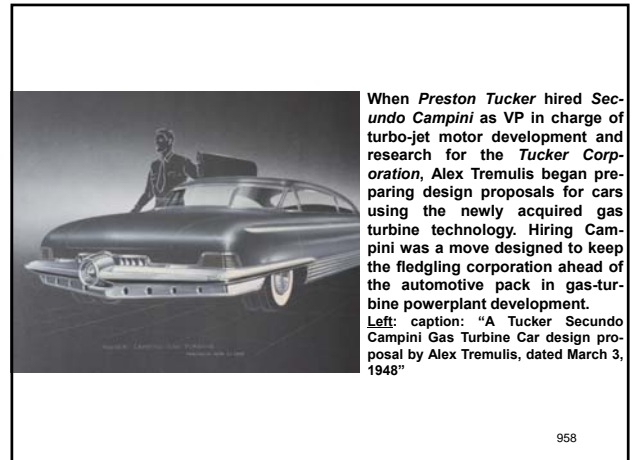


"...On the way to the bank two propositions were broached to Campini: Tucker was willing to sell him one of his two co-operative apartments, a 'steal' at \$30,000. Lochner was willing to borrow \$45,000 - for a couple of days. Campini knew enough English to say, 'No!' to both of these. At the bank, the account opened. Tucker wrote out check number one in Campini's book for \$30,000. 'Don't protest here,' Lochner told Campini. 'It'll embarrass Mr. Tucker with the bank people.' Campini signed the check reluctantly, after Lochner assured him that he would get his money back. Lochner then made his own \$45,000 touch. Thus baptized, Campini learned another English word, 'lawyer.' He hired one, and got his money back..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine. To diversify his company, Tucker imported Italian engineer Secondo Campini, who was well known and respected in the aviation industry. He was put in charge of pursuing a U.S. Air Force development contract, hoping to use Tucker's huge Chicago factory to someday build more than just cars. Campini and Tucker also began developing plans for a gas turbine-powered car to be produced by Tucker.

957



The Loving Cup

959

"...In the meantime, Tucker was getting awards as an inventor. At Los Angeles, the World Inventors Exposition, a show owned by two promoters named Harry M. Joyce and Monroe Manning, was drawing large crowds with its exhibit of a handmade Tucker car. To show their gratitude, the promoters asked a board of judges to give Tucker an award as an inventor. The judges protested that a car was a manufactured product, not an invention. The promoters then asked Tucker what he'd like for a gift. A large loving cup suitably engraved to state his accomplishments in the automobile industry, replied Tucker. The promoters got a secondhand loving cup and had engraved thereon:

World Inventors Exposition
Los Angeles, Cal.
First Award Presented to Preston Tucker

'Cheap and revolting,' Tucker fumed as he rushed the cup back to the promoters. 'Why doesn't the inscription mention the safety features embodied only in my car?'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine 960



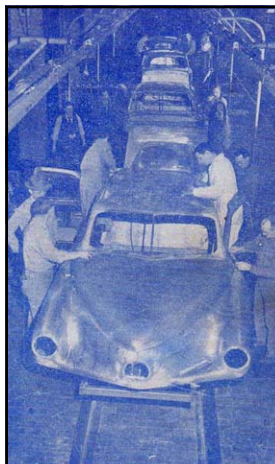
"...The promoters bought another secondhand loving cup and wrote a new inscription, this time to Tucker's taste. The corporation house organ; Tucker Topics, and the company's first annual report, mailed to 50,000 stockholders and 2,000 dealers, told about the award: 'At the World Inventors Exposition in Los Angeles, the Tucker '48 was hailed as the outstanding invention of the year, winning first award in competition with creations of distinguished scientists, engineers and inventors all over the world. Presentation of the coveted trophy was marked by attendance of film colony's top stars and executives'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine 961

The Happy Show

962



"...Inventor Tucker had his loving cup in March, 1948. but with the first annual stockholders' meeting approaching, he still had no production line turning out automobiles. The stockholders would be coming to the plant. What to do? Employees worked furiously for two weeks improvising a going assembly line. When some 1,700 stockholders were ushered into the plant, they were delighted to see an assembly line, seemingly in operation, with forty-odd car bodies (their parts rushed to partial completion by hand) spotted along the line. President Tucker spoke: 'Bodies and chassis are moving on the actual production lines, blazing the way for mass production models'..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine 963

"...When the happy show for the stockholders was over. Tucker and his associates held a gloomy meeting. Money was running out. Without additional cash - at least another \$20,000,000 - there could be no mass production. But Advertising Manager Cliff Knoble had an idea. 'All those people waiting to buy Tuckers, but no Tuckers,' he said. 'Why not sell them accessories - seat covers, heaters, luggage? If we offer them a priority on a Tucker, they'll buy!' Knoble - and Barnum - were right..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine. By the spring of 1948, Tucker had a pilot production line set up but his stock issue had been \$5 million short and he again needed immediate cash. He began a pre-purchase plan for Tucker automobile accessories such as radios and seat covers. Although he raised \$2.3 million, advanced payment on accessories to a car not yet in production was the final straw for the SEC. On May 28, 1948, the SEC and the Department of Justice launched a full-scale investigation. Investigators swarmed the plant and Tucker was forced to stop production and lay-off 1,600 workers. Receivership and bankruptcy suits piled up, creditors bolted and Tucker Corp. stock plunged.

964

The Beginning of the End

965

"...Although no car was in production, \$2,300,000 of accessories were sold. But that wasn't enough. Now, time as well as money was running out for Tucker. The corporation had sent its first annual financial statement to the SEC. It was the beginning of the end. The agency's experts, glancing at the statement, gave out with a startled 'Gee whizz!' The report showed no assembly lines, no cars in production and practically no money. Tucker, by early 1948, had sailed through \$22,000,000 of investors' and dealers' cash and had less than \$2,000,000 left (the report was filed before the accessories were sold)..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

966

"...The SEC sent out a team of investigators. Their findings, 700 pages' worth, made such exciting reading that the SEC turned them over to Attorney General Clark, who handed them on to U.S. District Attorney Otto Kerner at Chicago and his chief assistant, Lawrence J. Miller. The prosecutors read the report and called a grand jury..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

967

Young Preston

968

"...Under the SEC (and FBI) probes' scrutiny, Tucker's career looked less brilliant than it had in the press interviews and paid ads. Born 45 years ago at Capac, Michigan, Tucker grew up in Detroit. During his two years at high school, he flunked mechanical drawing, mechanical arts and algebra. He entered but didn't finish technical high school. Young Preston started his business career as a mail messenger at General Motors and then moved on to shipping and traffic department jobs at Ford which paid 75 to 90 cents per hour. He hired out as a motorcycle cop at Lincoln Park, Michigan, but was fired when his mother complained that he was under twenty one. Later he rose to the position of traffic manager of a Detroit brewery - and was fired on charges that he sought to win stockholders' proxies and get control of the brewery. Hired as a vice-president of a company distributing Packards in Indianapolis, he was fired again. 'It's hard steering Tucker along the right lines,' his boss said..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

969

Mr. Tucker Meets Mr. Higgins

970



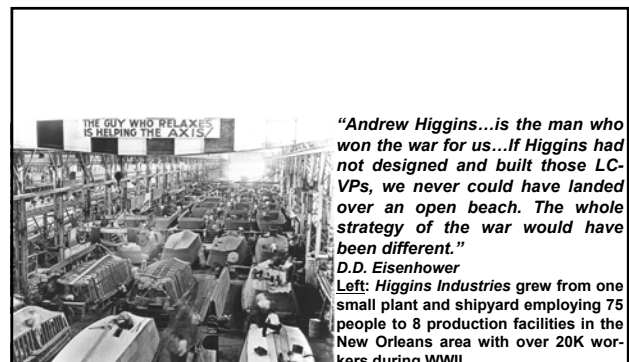
"...During the war, Tucker promoted a combat car, which he built, and a gun turret and fire interrupter for which he holds patents. He interested Andrew J. Higgins, the New Orleans shipbuilder, in the combat car and gun turret. Higgins thought the gun turret had possibilities and hired Tucker to form a company and develop it. After a year, Tucker was fired from this job also..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

971

Above: LCVP (Landing Craft, Vehicle, Personnel) being transported (a/k/a "Higgins Boat")

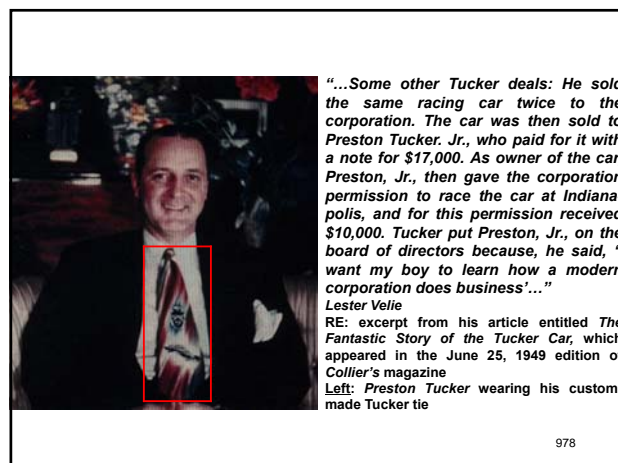
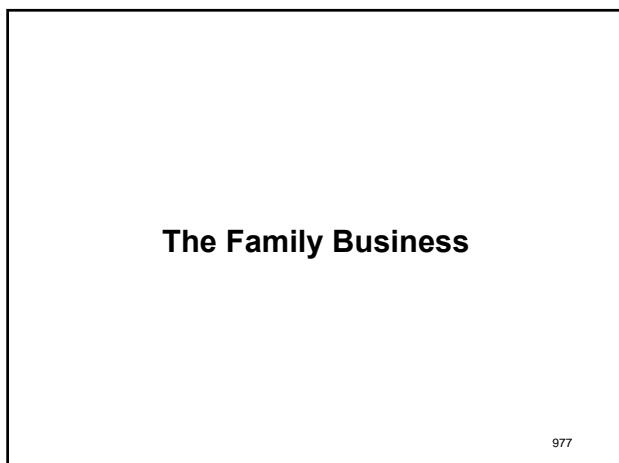
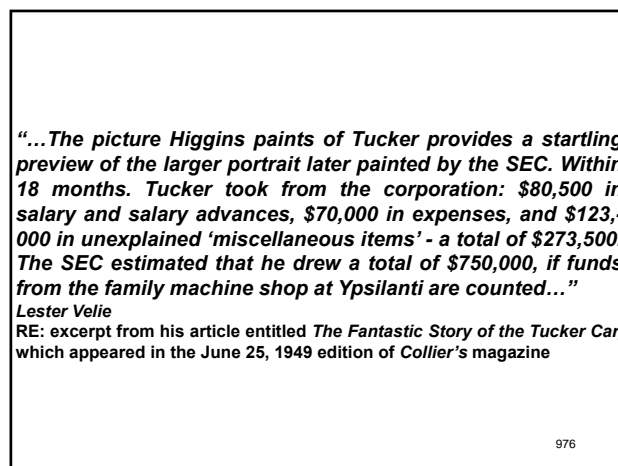
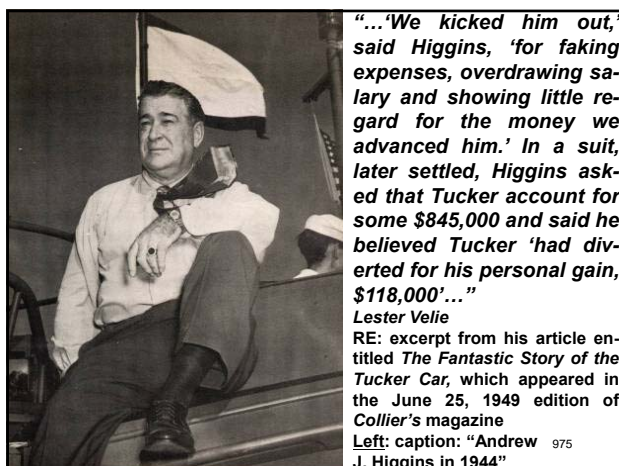
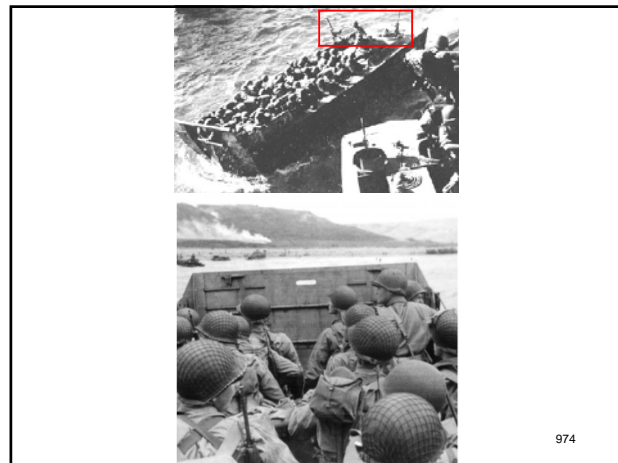
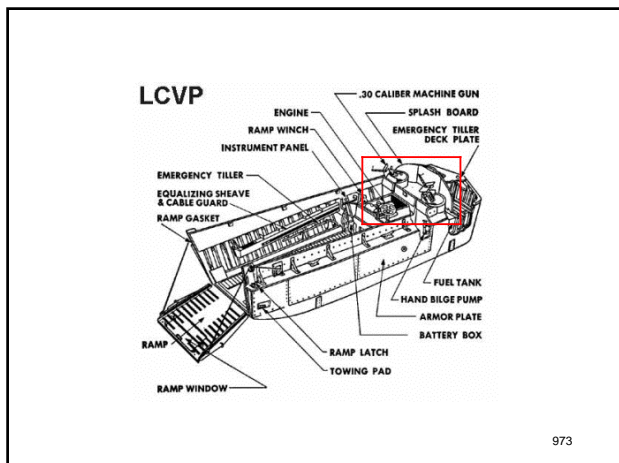


"Andrew Higgins...is the man who won the war for us...If Higgins had not designed and built those LC-VPs, we never could have landed over an open beach. The whole strategy of the war would have been different."

D.D. Eisenhower

Left: Higgins Industries grew from one small plant and shipyard employing 75 people to 8 production facilities in the New Orleans area with over 20K workers during WWII

972



"...Here is how the modern Tucker Corporation bought coal. From the Hughett Coal Company came an offer to supply coal. The Hughett Coal Company was the property of Emory Hughett, bookkeeper for the Tucker family machine shop at Ypsilanti. Its only address was a post office mailbox; its offices were in the Ypsilanti Machine and Tool Company. The Hughett Company had no credit at the banks (having just been formed) and asked the Tucker Corporation for a \$35,000 advance to use as working capital. In return, bookkeeper Hughett would sell the corporation coal at \$1.30 more per ton than it was then paying. Fair enough? The Tucker Corporation grabbed up the offer and bought \$83,000 worth of coal. The \$35,000 advance was never returned. Also, some of the coal proved so inferior it had to be rejected..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

979

Barbarians at the Gates

980

"...Tucker scraped the bottom of a barrel that had once bulged with \$26,000,000. He shut down the plant and fired 2,000 employees. He, too, was unemployed, but not unoccupied. Disillusioned stockholders and dealers sued him in such droves that one Chicago observer estimated some 500 lawyers, for and against Tucker, were involved. Some lawyers went after him with the zeal of public prosecutors. One, Luis Kutner, who lectures at Yale, even hired a staff of investigators and pushed his own one-man grand jury probe..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

981

"...When the multitude of hostile lawyers sought to throw Tucker into bankruptcy, he pleaded with United States District Judge Michael L. Igoe to stay all suits until he could raise additional millions. Judge Igoe assented and for five months was regaled periodically with reports by Tucker of imminent deals with 'angels' eager to bail him out. Rumored as angels were Glenn McCarthy, the Texas oilman, Howard Hughes and Sonja Henie. This led one wag to predict 'rear-engined autos on ice skates for Chicagoans to use on wintry days.' When the angels turned out to be ghosts. Judge Igoe said: 'I don't have the least bit of confidence in the statements of Mr. Tucker.' Soon after, Judge Igoe named trustees for the Tucker Corporation under Chapter 10 of the National Bankruptcy Act..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

982

Dealers Will Aid Tucker Car Firm

Columbus, O. (AP)—Forty Tucker automobile dealers from Ohio and Southern Michigan Thursday night agreed to help the Tucker Corporation meet current bills and obligations. N. C. Farber of Columbus announced.

Mr. Farber, himself a Tucker dealer, said the dealers voted to participate in a factory-sponsored program to raise two million to three million dollars by December 22.

W. K. Johnson of Chicago, a factory representative, outlined the company program.

A report that James D. Mooney, president of Willys Overland Company would head a Tucker reorganization was discussed.

Tucker Company Is Offered Assist

Boston, Mass. (UP)—The Beacon Wax Company of Boston has asked the Tucker Automobile Manufacturing Company of Chicago for a chance to put the financially ailing firm back into business.

Though details of the plan were not disclosed, the Beacon Company said its plan "might assure a comparatively high return to the Tucker stockholders as well as enable valuable Tucker assets to be put to immediate profitable use."

983



984

Why?

985

"...The debacle has stirred demands for more stringent federal protection for investors. Why was Tucker permitted to trade airy promises for little people's hard-earned savings? If the SEC is a 'securities policeman,' why doesn't it do its policing before people get hurt?..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

986

Let the Buyer Beware!

987

"...When Congress passed The Securities and Exchange Act of 1935, it decided the government should not pass judgment on a promotion. If the government were given such powers, it would have a life-or-death veto over new business ideas and even over going firms which seek to raise money from the public. This would hardly fit into a free enterprise system. So Congress decided on a disclosure law. The promoter must tell all to the SEC, which then passes on the facts to the investor. After that it's, 'Caveat emptor: Let the buyer beware!'"

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

988

"...The SEC made Tucker disclose all, sure enough. Yet what did the SEC do with the torrid facts it so brilliantly dug out? It published them in stilted and tortured legalistic English in a closely printed, 15-page opinion which, to the average man, almost required an interpreter. And Tucker's publicity was so easy to read! Why didn't the SEC state its case in simple, newspaper English, in four pages instead of 15? The facts might then have trickled down to the public..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

989

What Should Be Done?

990

"...While the SEC could and did make Tucker admit for the record that he had only an experimental car that needed extensive testing, his publicity and advertisements told quite another story. Millions were convinced Tucker had a revolutionary car ready for production. What should be done about a promoter who tells the SEC one thing but through press and radio reaches millions with another story?..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

991

"...This writer drove from Chicago to Detroit with Tucker in his handmade, pearl gray Tucker car. Tucker pushed the car along at an 80- and often 90-mile-an-hour clip. To the motorists we whipped by, the Hollywoodish, handmade car must have seemed a superior product. Actually, the car had few of the revolutionary features that had been advertised and was made up mostly of conventional parts. Reputable engineers who had worked on it pointed out further that the frame was too heavy and had to be re-engineered. Work was needed on the suspensions, the radiator and the brakes. The engine was so costly it would have to be redesigned or replaced to bring the car into the medium-price class. The car was unstable and tended to wobble..."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

992

The SEC's case had to show that the Tucker car could not be built, or if built, would not perform as advertised. But Tucker was building cars. Seven Tuckers performed beautifully at speed trials in Indianapolis that November, consistently making 90 mph lap speed. By Thanksgiving, only a skeletal crew of workers remained to assemble the only cars the company would ever produce. In January 1949, the plant closed and Tucker Corp. was placed under trusteeship.

993

The Only Car in Town

994



"...As we paused for lunch near Lansing, the usual crowd gathered about the sleek, dashing Tucker car. 'The only car in town,' said one admirer. 'No other car can touch it,' said another. 'Why don't those fellows in Washington and Detroit let you build it, Mr. Tucker?' asked several others."

Lester Velie

RE: excerpt from his article entitled *The Fantastic Story of the Tucker Car*, which appeared in the June 25, 1949 edition of *Collier's* magazine

Left: caption: "Preston Thomas Tucker sits at the wheel of a handmade Tucker car. Note the gearshift rod. It reveals that the car is equipped with a reworked Cord transmission. The Tucker Corporation once paid \$223,105 to a Tucker-controlled machine shop to get 25 of these reworked transmissions."

995

The Court of Public Opinion

996



On March 3, 1949, Tucker Corp. went into receiver-ship. Also in March, the *Detroit News* ran a headline: "Gigantic Tucker Fraud Charged in SEC Report." The article related an SEC report recommending conspiracy and fraud charges against Tucker. Incensed, Tucker demanded to know how the newspaper had seen the report even before him. SEC Commissioner *John McDonald* later admitted he delivered the report to the paper in direct violation of the law. Feeling tried and convicted by the press, Tucker wrote an open letter to many newspapers around the country.

Left: caption: "Preston Tucker speaks to crowd"

997

An Open Letter to The Automobile Industry In The Interests Of The American Motorist, by Preston Tucker - President, Tucker Corp.

Gentlemen:

As you know, we are building a completely new motorcar - the rear engine Tucker. Being newcomers in the field we have had to start from scratch and work harder and faster than most of you. For example, instead of the 20 months you usually take to produce a new model of conventional design, my engineers have taken less than 10 to perfect a car which I firmly believe opens a new era in motoring.

In this same year, we have completed a nationwide dealer organization, acquired the largest most modern automotive plant in tile world, and cleared the decks for mass production. These things have been done - and well done - in spite of persistent and unfair opposition from within the automobile industry.

Please don't misunderstand me. Many of you have gone out of your way to be friendly to the Tucker Corporation. It's true, some of you have not shared our conviction that a rear-engine car is the car of the future, but you have been willing to let the American motorist judge that for himself, in the firm belief that what's best for the motorist is best for you in the long run...

RE: this "Open Letter" appeared in many newspapers in the U.S. on June 15, 1948

998

...But there is another group - a very powerful group - which for two years has carried on a carefully organized campaign to prevent the motoring public from ever getting their hands on the wheel of a Tucker. These people have tried to introduce spies into our plant. They have endeavored to bribe and corrupt loyal Tucker employees. Such curiosity about what goes on in the Tucker plant should be highly flattering, I suppose. But they haven't stopped there.

They even have their spokesmen in high places in Washington. As a direct result of their influence, Tucker dealers all over the country - men of character and standing in their communities - have been harassed and grilled by agents of the government and Congressional Investigating Committees.

My associates and myself and the Tucker Corporation have been investigated and investigated, time and again. Millions of dollars of the taxpayers money have been squandered in an utterly fruitless effort to kill the Tucker, to bar us from needed raw materials, to keep us so busy defending ourselves and our efforts that the motoring public would tire of waiting for a completely new rear-engine car. But they haven't been able to stop us...

999

...You know, perhaps, that our bid on a government owned steel plant in Cleveland was recently refused. Let me tell you the inside story of that; Sealed bids were called for, in accordance with law. Only two were submitted, one by the steel company operating the plant, the other by the Tucker Corporation. The bids were opened nearly five months ago. The Tucker Corporation's bid was high. If Tucker's bid had been accepted, it could have given taxpayers as much as four million dollars more for the plant than the steel company offered.

This plant would provide ample raw materials for volume production of the Tucker and would serve numerous small businesses now starving for steel.

You would think our high bid for the plant would have been accepted long ago. For five months political pressure, ruthless and barefaced, has forced delay after delay. We're still waiting. We don't know who is responsible for this. But who do you suppose is getting the raw material from this plant we want for Tucker and small business? None other than some well known - and unfriendly - automotive manufacturers.

Most of the political pressure and investigations we have had to face these last two years can be traced back to one influential individual who is out to "get Tucker." If he acts from honest conviction in his efforts to prolong the motorcar, then I hope he will have the courage to tell the public just that...

1000

...But personally we believe he has more obvious motives. Evidence in Tucker files, for example shows the controlling interest in a large sales agency of an automotive corporate subsidiary is in his wife's name. And when he gave an elaborate party at a Washington hotel a few months ago, who do you suppose paid the bill? None other than an official of an automobile manufacturer - a manufacturer distinctly unfriendly to the Tucker Corporation. Is all this, too, just coincidence?

Now once more we are being investigated. Just at the time we are getting into production on a car that has won the hearts of the million motorists who have seen it, just when the job of making automobiles demands all our time and energy, my associates and I are asked to take time out again and again ever since we had the temerity to suggest America is eager for a completely new car.

What would you think in our place? Would you say it was just coincidence - or would you think it was planned that way?...

1001

...You wonder, perhaps, why I have made these statements in an open letter. Here's why: As President of Tucker Corporation, I'm responsible to 1,872 Tucker dealers and distributors and nearly 50,000 Tucker stockholders. These people have put \$25,000,000 into the Tucker Corporation. And I am going to protect their interests.

In addition, we have promised American motorists a completely new rear-engine motorcar, and hundreds of thousands have written us that they are ready and waiting to buy it. Every day letters come to us from people who know that in fighting to put the rear-engine Tucker on the road we are, at the same time, fighting for their right as motorists to get the finest engineering American ingenuity can produce.

We are going to justify the support these motorists so generously have given us. We are going to give them the car they want at a price they can afford, and without paying tribute to the Black Market. How this will be done will be announced today...

1002

...But in the meantime, I want to register the fact that we have just begun to fight. We have been patient so far, but our patience is wearing thin. We can give names, dates and places to prove our charges of unfair competition, and if necessary we will do it.

When the day comes that anyone can bend our country's laws and lawmakers to serve selfish, competitive ends, that day democratic government dies. And we're just optimistic enough to believe that once the facts are on the table, American public opinion will walk in with a big stick.

1003

The Trial

1004

"...Witness after witness was called to testify how the Tin Goose broke down before the World Premiere – how the torque converters to both rear wheels were abandoned, and the Tucker 48 didn't have disc brakes or fuel injection. It looked like (Otto Kerner Jr., who prosecuted Tucker for fraud and later served as the governor of Illinois) entire case was riding on the helpless Tin Goose...."

RE: excerpt from *The Indomitable Tin Goose* by Charles T. Pearson (1960). On June 10, 1949, Tucker and seven of his associates faced a Grand Jury indictment on 31 counts: 25 for mail fraud, 5 for SEC regulation violation and one or conspiracy to defraud. The trial opened on October 5, 1949 and from the beginning, the prosecution based its entire case on the "Tin Goose" prototype. It refused to recognize the 50 production cars and called witness after witness who, under cross-examination, ended up hurting the government's case. In the end, Tucker's defense team merely stated simply that the government had failed to prove any offense thus, there was nothing to defend.

1005



On January 22, 1950, the federal jury found the defendants innocent of any attempt to defraud, but the verdict was a small triumph. The company was already lost. The remaining assets, including all the Tucker automobiles produced, were sold for 18 cents-on-the-dollar.

Left: caption: "After the verdict: Preston Tucker, auto magnate, with wife, freed of fraud charges"

1006



1007

Preston Tucker Seeks Machine Tools

Atlanta, Ga. (AP)—Preston Tucker, the man who planned the fabulous "Tucker Torpedo" automobile, turned up here Saturday, hunting machine tools to make jet engine parts.

"I'm starting all over again," said Mr. Tucker, who has gone back to his old job as general manager of the Ypsilanti, Mich., Machine and Tool Company.

He reported he was going to make parts for the J-65 engine, which is to be produced in this country by Curtis-Wright under license from Armstrong-Sidley of London.

1008

"...The plant closed and the trial dragged on from Oct. 5, 1949, until Jan. 22, 1950. Through it all, Tucker was upbeat and his defenders were steadfast, even if they'd lost money on the enterprise. When the government's prime witnesses were unable to convince the jury of his guilt, Tucker was acquitted. Though he'd won, he'd lost all his money and his dream. When Preston Tucker died of cancer in 1956, Tremulis said the cause of death was really a broken heart."
Chicagotribune.com, February 1, 2011

1009



1010

No Tears for Tucker

1011

"Francis Ford Coppola, movie director of 'The Godfather,' is talking about doing a picture on Preston Tucker and the Tucker automobile...Coppola apparently thinks Tucker was the victim of a conspiracy by government and Detroit. The martyr bit..."

Robert Lund

RE: excerpt from his column *Detroit Listening Post*, appearing in the March 1975 edition of *Popular Mechanics* magazine. The editorial was entitled: "No Tears for Tucker."

1012

The Great Suitcase Capers

1013

"...Well, I was working Detroit as a boy reporter then and I don't think there was a plot to give Tucker a bad time...One problem was he was always borrowing chips to cover his bets. One of his nuttier ideas was the great suitcase caper..."

Robert Lund

RE: excerpt from his column *Detroit Listening Post*, appearing in the March 1975 edition of *Popular Mechanics* magazine

1014

"...Everybody wanted to be an automobile dealer in those days and Tuck signed a lot of store-front operators to sell his car. Dealers had to pay for the franchise, but that money was soon gone and Tucker had to look for a new stake. That gave birth to the suitcase idea. You had to get on a waiting list to buy a car back then and people were coming in Tucker showrooms to sign up. Through his would-be dealers, Tucker had a proposition for would-be buyers - a line of luggage designed to fit the trunk of his car. His-and-her suitcases, overnight bags, satchels, vanity cases, everything except a steamer trunk. If you coughed up the \$600 price, your name was put on a special waiting list and you were supposed to get delivery ahead of other customers. Some government agency didn't like the smell of that one and Tucker had to withdraw it, but not before he unloaded a lot of luggage on a lot of people..."

Robert Lund

RE: excerpt from his column *Detroit Listening Post*, appearing in the March 1975 edition of *Popular Mechanics* magazine

1015

"...I ran into Tucker at a University of Michigan football game years after he called it quits on the car. He didn't want to talk about it. He was an interesting guy, a great promoter. But he was not a victim of any Machiavellian plot to do him in."

Robert Lund

RE: excerpt from his column *Detroit Listening Post*, appearing in the March 1975 edition of *Popular Mechanics* magazine

1016

When I was a Boy

1017

"When I was a boy, I used to, uh, used to read all about Edison and the Wright Brothers, Mr. Ford. They were my heroes. 'Rags to Riches' - that's not just the name of a book. That's what this country was all about. We invented the 'free enterprise' system, where anybody, no matter who he was, where he came from, what class he belonged to - if he came up with a better idea about anything, there's no limit to how far he could go..."

RE: Preston Tucker's closing arguments to the jury during his trial (from the 1988 movie *Tucker: The Man and His Dream*)

1018

Flying Kites

1019

"...I grew up a generation too late, I guess, because now the way the system works, the loner, the dreamer, the crackpot who comes up with some crazy idea that everybody laughs at, that later turns out to revolutionize the world - he's squashed from above before he even gets his head out of the water because the bureaucrats, they'd rather kill a new idea than let it rock the boat! If Benjamin Franklin were alive today, he'd be thrown in jail for sailing a kite without a license! It's true. We're all puffed up with ourselves now 'cause we invented the bomb - dropped the - beat the daylights out of the Japanese, the Nazis. But if big business closes the door on the little guy with a new idea, we're not only closing the door on progress, but we're sabotaging everything that we fought for! Everything that the country stands for!!..."

RE: Preston Tucker's closing arguments to the jury during his trial (from the 1988 movie *Tucker: The Man and His Dream*)

1020

One Day

1021

"...And one day we're gonna find ourselves at the bottom of the heap instead of king of the hill, having no idea how we got there, buying our radios and our cars from our former enemies. I don't believe that's gonna happen. I can't believe it because - if I ever stop believing in the plain 'ol common horse sense of the American people, be no way I could get out of bed in the morning. Thank you."

RE: Preston Tucker's closing arguments to the jury during his trial (from the 1988 movie *Tucker: The Man and His Dream*). Contrary to the movie version, *Preston Tucker* never went on the stand in the trial. His attorneys simply said: "We need no defense, because there was no offense."

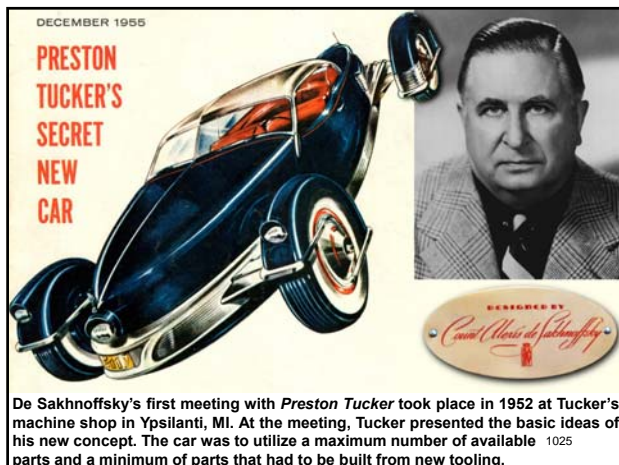
1022

The Carioca

1023

Preston Tucker's dream of manufacturing innovative automobiles did not end with his acquittal on fraud charges in January 1950. A few years later, he had an idea for a new Road-ster. He collaborated with one of the foremost designers of the era; *Count Alexis de Sakhnoffsky*, to mass produce a car that was both fun to drive and inexpensive. By 1955, his concepts were worked out and a vision for what the car would look like was made manifest by Sakhnoffsky. However, *Preston Tucker* could not use the "Tucker" name for the car since *Peter Dun* (of *Dun & Bradstreet*) had purchased the rights to the Tucker name. The new car was to cost \$1K, sold as a kit and be easily assembled.

1024



1025

Tucker claimed that research proved that from 10 to 12 pounds of accumulated mud, gravel and tar were embedded under each of the four fenders of a conventionally designed car. Tucker's solution to this problem was to fit his new car with cycle fenders that could be easily removed for cleaning. The front fender/s were also equipped with headlights that would turn with the wheels as the car was steered (the center "Cyclops" headlight was stationary). Tucker firmly believed that a rear-engine car offered several advantages such as reduced noise, a front-end with a slim, streamlined shape and added safety in case of a head-on collision. The instrument panel would contain an oversized speedometer surrounded by four gauges (fuel, oil, temperature, and amperes), much like the Tucker 48's. Race car designer and Tucker friend/associate *Harry Miller* influenced Tucker and de Sakhnoffsky's decision to use a pointed tail in the final design. The greatest deterrent to producing the car was the cost of body and sheet-metal dies. Some die work (i.e. hood and/or rear-engine cover) had to be considered. However, for constructing doors and other components involving simple one-way stretch or rolled operations, Tucker received an enthusiastic response from a number of pre-fab house/trailer builders. Those composite assemblies should be shipped directly to the buyer, along with the rest of the parts for the kit car.

1026



Preston Tucker understood that throughout the U.S., there were many garage owners who were eager to obtain a "Big Three" franchise, but were unable to. Tucker, hoping to tap into this frustration while, at the same time, provide the owner of his new car with a service outlet. The customer would be encouraged to have their car assembled by a specially authorized garage owner for a pre-arranged fee of \$60. Hearing about his friend's plans to build a new car, Juscelino Kubitschek - President of Brazil, offered Tucker inducements (in the form of tax-free plants) if the car was assembled in Brazil. Tucker made several trips to Brazil and even considered launching the car in South America. In fact, due to this possibility, Tucker and de Sakhnoffsky agreed to call the car the "Carioca" (Carioca was the name of a ballroom version of the Samba and also the name of a citizen of Rio de Janeiro).

1027



Preston Tucker's travels to Brazil were plagued by fatigue and, upon his return to the U.S., he was diagnosed with lung cancer. Tucker died from pneumonia as a complication of lung cancer on December 26, 1956, at the age of 53. The *Carioca* was never realized.

1028

Founder of the Tucker Car

1029



1030

Part 8 I Never Gave Up

1031

Fortune Favors the Bold

1032

"The controversy over the daring post-war Tucker car is not dead! CAR LIFE brings you the exclusive story of Preston Tucker's newest plan for a revolutionary new automobile..."
CAR LIFE, December 1955

1033

"...There have been few men in the automotive industry who have managed to capture the imagination of the American car public as completely as Preston Tucker. In the post-war years, his Tucker car was on the lips of every potential car buyer; his personality, a topic of endless discussion..."
CAR LIFE, December 1955

1034



Above: caption: "First pilot model of the new Tucker automobile was shown to Portland newsmen Thursday by James Edward Rogers (left), president of Oregon Tucker Sales, Inc. and A.M. Stratton, Seattle distributor"

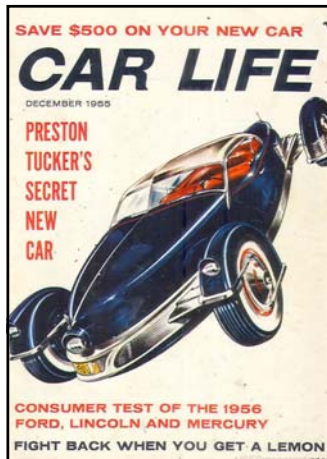
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"...Well, the Tucker car as Preston Tucker first envisioned it, is dead. Tucker says so himself. But, Preston Tucker seems to be pretty much alive..."
CAR LIFE, December 1955

1036



1037



"...We don't know whether Tucker will ever actually get another chance to produce a miracle car. But CAR LIFE does feel that this man has something to say of interest to you, And we think it is our duty to the American car consumer to provide the space for him to say it..."
CAR LIFE, December 1955

1038

For the Millions of Motorists

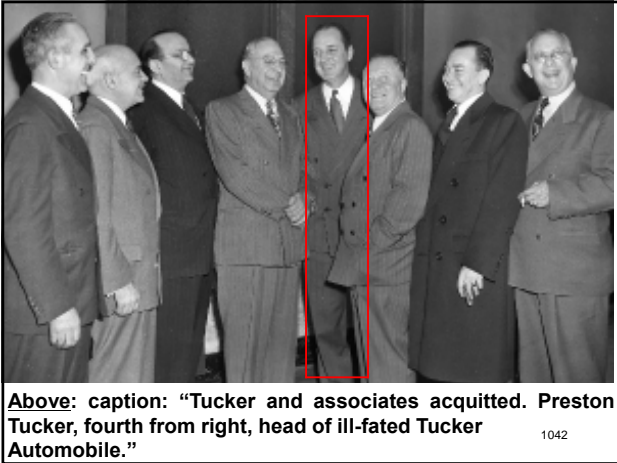
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"...In January 1949, I was acquitted by a Federal jury in Chicago of criminal conspiracy charges, I had tried to put the revolutionary rear-engine Tucker car on the market. Now, almost six years later, I want to make a report to the millions of American motorists who placed so much faith in me. I want them to know that since the trial I have had only one aim in life - to build and market another Tucker automobile, one that will exceed every claim we ever made for the first car. I have this new car now! And this is my first report on it..."
RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

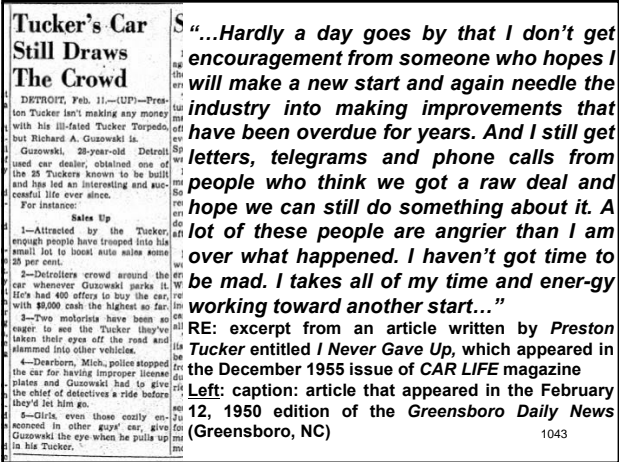
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1044

Towards a Better Day

1045

11 Tuckers Sold
at Assets Auction

Chicago, Ill. (INS)—Bidding on assets of the defunct Tucker Corporation began Wednesday with the playful jibe—"This is the auction of the car of the future. What am I bid?"

One thousand buyers crowded the auction room of the huge Chicago plant—built by Dodge during World War II—to bid on \$4,500,000 worth of equipment from the ill-fated Tucker automobile firm.

During the four-day auction, 4,250 lots of goods will go on the block, as ordered by the United States District Court. The plant is being cleared to make way for the Ford Motor Company, which will build B-36 aircraft engines.

Eleven slightly used Tucker "dream cars," all used by demonstrators, brought an average of \$2,200 each. David Graven, of Irvington, N. J., bid \$2,200 for a Tucker. He said:

"I lost 50 thousand dollars in my Tucker investment. Now I'm willing to pay \$2,200 to have something to show for my experience."

"...It took me a long time to get going again after the trial was over. There are a lot of people, particularly those who had a part in putting us out of business, who think I took a fortune out of Tucker Corporation at the expense of the stockholders and dealers. They seem to think whenever I run low on money, all I have to do is go out into the back yard and dig up another package of money where I buried it before the trustees took over..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1046

"...It would be real convenient if I could do that, but the fact is that when the trial was over I was broke. And it took a long time to get started again, operating the Ypsilanti Machine & Tool Company, which is owned by my mother. For several years the tool company made fair profits, and I put every dollar we could spare into designing a new Tucker automobile..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1047



"...Of course, there are still old Tucker automobiles running today and running well, after more than 100,000 miles of hard service. And they will compare favorably with most of the cars built today. But as far as I am concerned the original Tucker is obsolete, even though its most important features will be retained..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine
Above: caption: This old Tucker is now obsolete, says the inventor. But some of the original cars are still on the road."

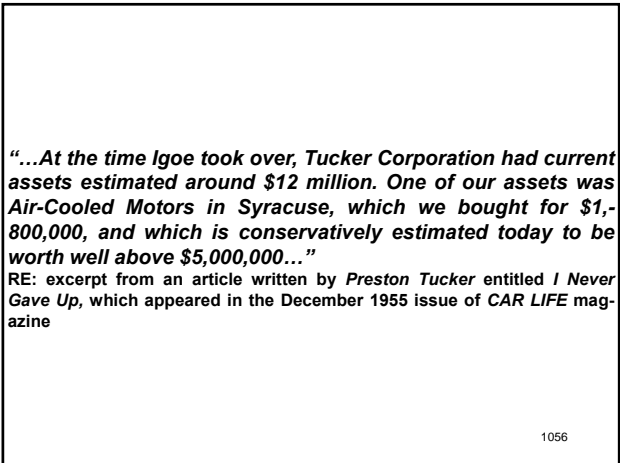
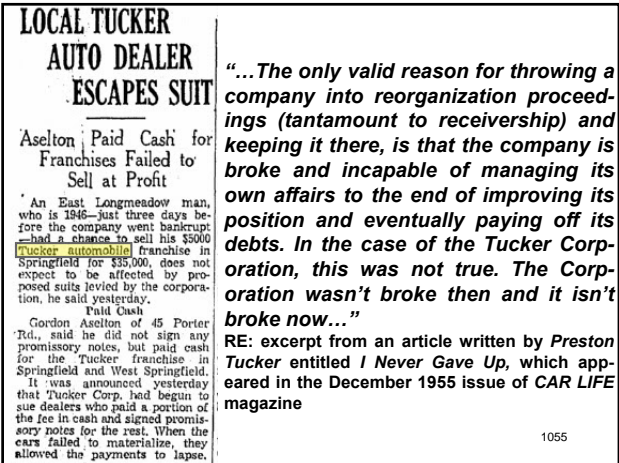
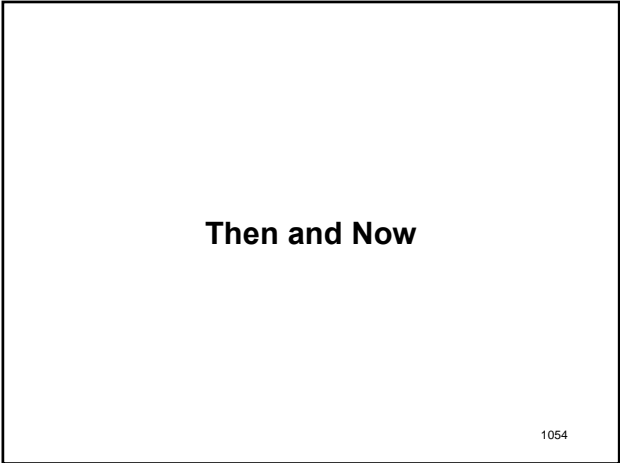
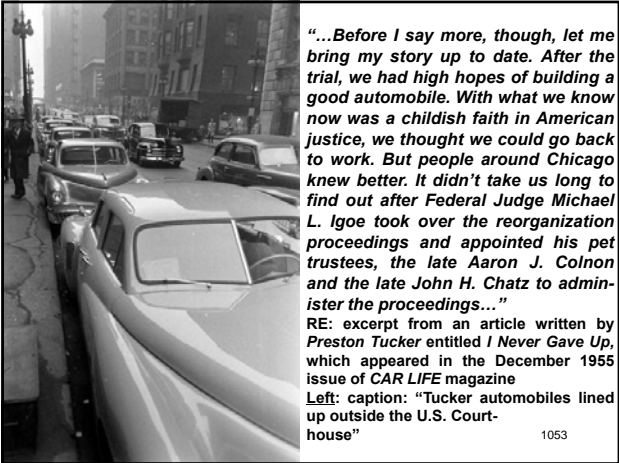
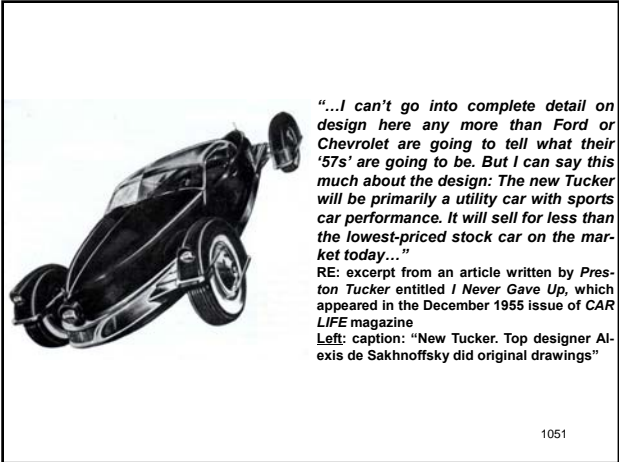
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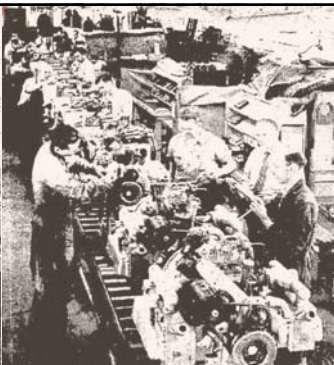


Engines Made Here for Tucker Car

AIR-COOLED MOTORS' plant is making regular shipments of Tucker horizontally opposed liquid cooled 166-h.p. engines to Chicago, Carl F. B. Roth, president and general manager, announced today.

"We are tooled now to deliver 50 engines a week to the assembly plant in Chicago and will increase this amount to meet demands," Roth said.

"When these engines come off our assembly line they are complete with accessories, have been tested and are ready to install and run."



Above: caption: "Six cylinder liquid cooled engines roll off Air Cooled, Inc. assembly lines ready for shipment to Chicago where they will be installed in new Tucker automobiles. The Liverpool plant is tooled to produce 150 engines a week." (*Syracuse Herald-Journal*, June 16, 1948) 1057

"...Air-Cooled has shown consistent profits of around \$400,000 a year over the past seven years, except for last year. This means that Air-Cooled alone has brought approximately \$2,000,000 - more than Tucker Corporation owed on legitimate debts. If we had been allowed to start again after the trial was over, I am confident we would have succeeded, and there would have been no loss to either stockholders or dealers..."

RE: excerpt from an article written by *Preston Tucker* entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1058

Competition Is A Sin

1059



"...Our most important advantage at that time was that public confidence was restored when we were cleared. I am even more positive today that we would have succeeded - especially when I now see the industry belatedly beginning to realize the importance of design for safety, which we had for our major objective in the very beginning..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

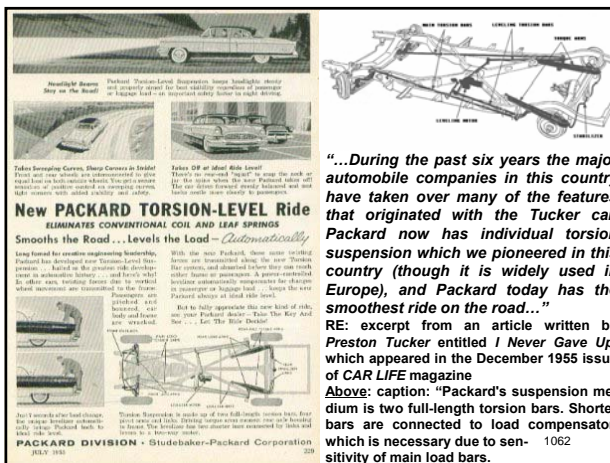
1060



"...I don't propose to go into any exhaustive detail regarding the people and events in the campaign that removed the Tucker car from the market. But it was a threat to established manufacturers who would have had to spend millions to meet performance and safety standards that we set..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1061

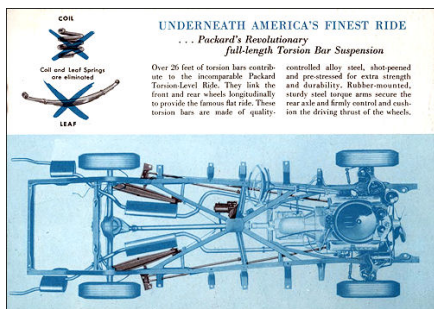


"...During the past six years the major automobile companies in this country have taken over many of the features that originated with the Tucker car. Packard now has individual torsion suspension which we pioneered in this country (though it is widely used in Europe), and Packard today has the smoothest ride on the road..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

Above: caption: "Packard's suspension medium is two full-length torsion bars. Shorter bars are connected to load compensator, which is necessary due to sensitivity of main load bars." 1062

1062



1063

A Hazardous Scheme

1064

New Tucker Automobile Is Unveiled; Maker Calls It 'Safest Ever Built'

Chicago (AP)—The new Tucker automobile, described by its makers, the Tucker Corporation, as "the first completely new automobile in 80 years" was brought out for unveiling Tuesday.

Auto dealers and distributors were invited to the huge Tucker plant for the first showing of the car by Preston Tucker, 44-year-old race-car designer and head of the corporation. He says his model is a "better and safer car than ever has been built."

The company announced that the car, with a 2,800-pound shipping weight, a wheel base of 126 inches and standing 50½ inches high, has a 150-horsepower airplane type engine located in the rear. The company also said the car can stop in 240 feet while traveling 55 miles an hour, and at indignant speed can travel about 35 miles on a gallon of gasoline.

Mr. Tucker has said the Tucker car will eliminate "approximately 800 parts" now used in conventional models, including the fly wheel, ring gear, clutch and clutch mechanism, universal joint and drive shaft.

The company has announced that it expects to sell 129 of the new cars in September at a retail price of \$1,500 each, and by the end of the year to reach a Tucker daily capacity.

"...My chief aim in the Tucker was - and still is - safety and after all these years the industry is finally waking up to the fact that their customers deserve something for their money besides speed and horsepower. The present race race to see who can make the most powerful engine and still get it inside the car is simply a hazardous scheme to sell automobiles. This tremendous power has essentially the same body and braking system that slower automobiles had 20 years ago..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1065



Left: "Miss Unsafe Brakes, 1939" appeared at the *Chicago Auto Show* dressed in a skeleton costume to drive home the importance of brake safety. In 1939, 30,895 people were killed in the U.S. in car accidents. By the 1950s, American automakers started adding standard safety features such as seat belts, headrests and shatter-resistant windshields. In 2012, 33,561 people were killed in highway accidents in the U.S. However, by 2012, Americans were driving 10x the number of miles annually as was the American driver of 1939.

1066

BETTER BE SURE YOUR BRAKES ARE RIGHT—



STOP NOW FOR FREE BRAKE INSPECTION

Left: caption: "Sonja Henie, 'Queen of Ice,' helps illustrate safe advice. She loaned her glamour to get attention, for safety facts that needed mention. National Safety Council chart is seen, get your eyes off her figure, to the figures we mean!"

Sonja Henie won the Gold Medal for figure skating at the 1928, 1932 and 1936 Winter Olympics. In 1944, she was hired to be the spokesperson for the *National Safety Council* (precursor to the NHTSA) to promote safe winter driving. In those days, driving a car with four wheel drum brakes in winter required a certain amount of skill to get the car to stop in a straight line.

1067

By the mid-1950s, the automotive brake industry was at a crossroads. In the post-WWII era, American cars significantly increased their horsepower and weight. However, how brakes and friction materials were serviced had hardly changed at all. At the time, service shops could still buy a roll of friction material (or a very generic friction set) and rivet the friction material to the shoes - the same way as they had done it in the pre-WWII years. During WWII, new adhesives were developed that could hold friction materials to a shoe without rivets, but the adhesives could be difficult to manage in the shop environment. Enter the "bonders." These were local businesses that would sell a customer a new set of brake shoes ready-to-go (in return, they would take back the worn shoes for recycling). It was a "win-win" for the service shops; no more rivets and the brake shoe sets from most bonders were superior to anything they could do in-house. Disc brakes had been around since the 1930s, but were typically used only on sports cars and some imports. By 1969, many domestic cars were starting to use disc brakes as a standard option. It wasn't until about 1974 that the disc/drum (front/rear) set-up became standard on all domestically produced vehicles.

1068

"...Today's cars have inadequate brakes, largely because of incorrect weight distribution - when you put on your brakes, your car's weight shifts to the front, where the front wheels have to do most of the work. The Tucker, with its engine in the rear, had far more equal distribution for braking..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine.

1069



1070



"...Two of our most important safety features were the padded dash on the passenger's side in the front seat, and the pop-out windshield that would be jarred loose in a collision. But, back to the financial situation..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1071

Igoe and His Cohorts

1072

"...If we could pry Air-Cooled Motors loose from Igoe and his cohorts, we would be in business now. Air-Cooled has the experience and know-how to make an efficient lightweight engine that will really perform and stand up..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1073

On the Table

1074

"...I have offered my new program to the trustees, who control Air-Cooled Motors and still have enough cash and assets to finance the program..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1075

The Hard Facts

1076



"...But let's look at the hard facts - with returns from the trusteeship running at least \$50,000 a year, why start the automotive program again when all they have to gain is progress and a profit for the dealers and stockholders?..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1077

What to Expect

1078

"...Despite this opposition, I am determined that the new Tucker car will see the light of day. Take a look at the illustrations. They were done by Alexis de Sakhnoffsky and give you a hint of what to expect..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1079

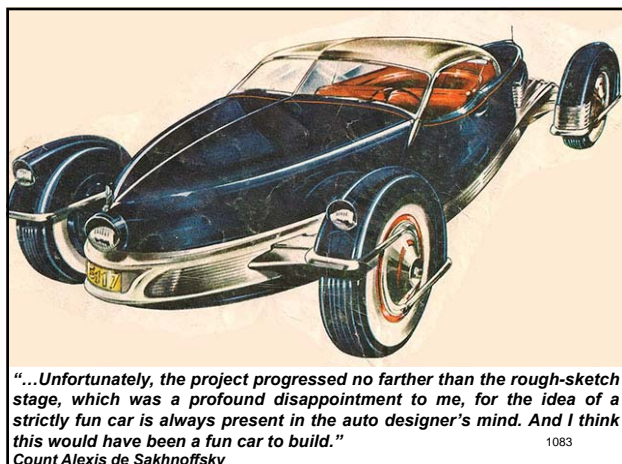
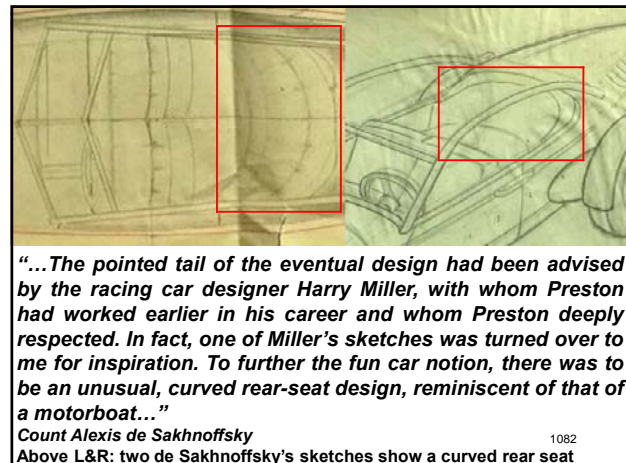
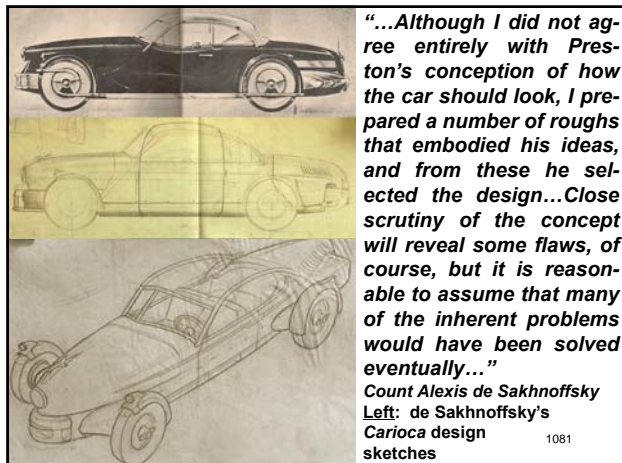


"...The overall plan includes a utility passenger automobile, a pickup and a truck, with as many interchangeable mechanical parts and body stampings as possible. Final body design has not been fixed, and will not be revealed until pilot models are completed..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

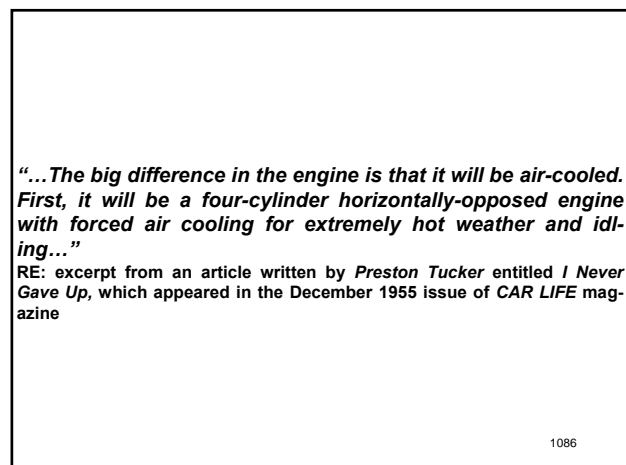
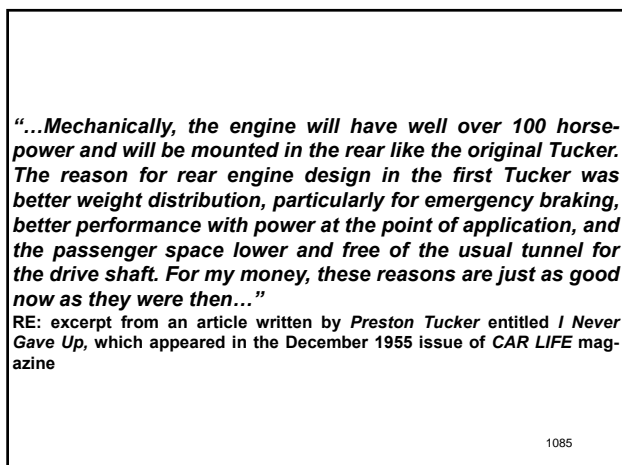
Above: a clay model of de Sakhnoffsky's design for the Carioca automobile

1080



For My Money

1084



The First motor car with an Airplane-Type Engine

“...In my opinion the next big advance in auto engines will be air cooling. Franklin proved it was possible when it built some of the finest cars of its day with air-cooled engines...”

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

Left: caption: “A revolutionary engine which has flown the skies and delivers the greatest power for cylinder capacity of all automobile powerplants” (Franklin advertisement, ca. 1930)

1087

Franklin

4 CYLINDERS AIR-COOLED

The best proposition before a buying public to-day.

See it at the Chicago Show

Franklin Light Roadster for 1912

The Franklin is the only motor car made having a four-cylinder air-cooled motor. “Air-cooling” means that the heat engendered in the cylinders is dissipated by direct radiation and air circulation, instead of by the expensive and complicated method of the water-circulating system. That the best agents are selling the Franklin is one of the strongest guarantees we can give of the success of our air-cooling system. It is simplicity reduced to the limit. It is practicability put to the highest notch.

H. H. Franklin Mfg. Co., 208 So. Geddes Street

NEW YORK: American Automobile Storage Co., 40 W. 40th St. SYRACUSE, N. Y. CHICAGO: Ralph Temple & American Co., 220 Wabash Ave.

1088

“...Air cooling fell into disrepute in those days because they didn't have the metals needed to do the job. When other manufacturers tried it, they fell on their face...”

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1089

Copper-Cooled

1090

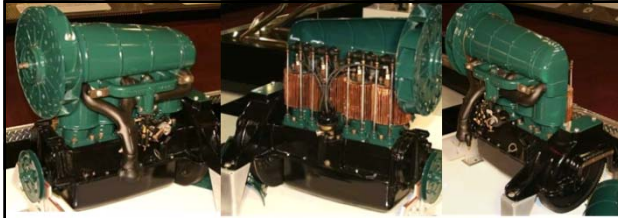
“...One of these was Chevrolet, whose air-cooled monstrosity was known affectionately around the experimental shop as the ‘Vacuum Cleaner,’ because its fan sucked up everything loose within range...”

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine. Designed by Charles F. Kettering, Chief Engineer of Delco Electronics (GM's research division), the 1923 Chevrolet Series C Copper-Cooled was designed to be completely air-cooled. Air cooling (as opposed to water-based cooling) was desirable since it doesn't require a radiator and all its associated pipes and hoses. Air-cooling was not unknown at the time (i.e. Franklin), but it was new to an engine of this size (135 cu. in., 215 lbs.).

1091

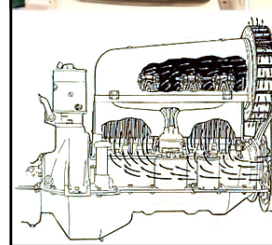
Although Oldsmobile was independently working on an air-cooled engine design of their own at the time, they did not participate in the Chevrolet project. Kettering decided that a cast-iron engine with copper U-shaped fins would give the best cooling (as opposed to aluminum). Copper was a suitable candidate due to its superior conduction properties (the copper fins would be welded electrically to the engine). Kettering spent extensive amounts of time researching fin patterns that would provide the most efficient cooling as well as different ways of manufacturing and assembling the copper fins. He used an Over-Head Valve (OHV) arrangement (at the time, an advanced design). An OHV engine allowed for better cooling on the top of the engine, as well as between cylinders.

1092



An issue arose concerning where to incorporate the copper-fins. Kettering took the top of the combustion chamber and incorporated it with the actual cylinder to solve the problem, simultaneously solving multiple issues (i.e. oil leaks, which create a fire hazard in an air-cooled engine). Kettering found that the best solution was to create only one possible leak site above the cylinder heads (the joint between the crankcase and the cylinder). This left nearly no oil above the cylinders and only one possible place for a leak to occur, significantly reducing the risk of an oil leak and making it easily detectable by mechanics. Kettering also decided to add a fan at the base of the engine to add an induction element to the cooling system. A large impeller (mounted on the front) forced air down over the fins where it exited just above the crankcase on both sides. The fan would turn at 1.5x the speed of the engine, pulling air through a vent from the bottom of the engine manifold.

1093



"The only question that seemed to remain at the beginning of the new year regarding the water cooled car was the exact date on which it should be abandoned"

Charles F. Kettering

RE: the engine was cooled unevenly and showed significant power loss in hot weather (it also pre-ignited severely at higher temperatures), posing a safety hazard to the driver. Production was set for 1K cars by February 1923 and by October, 50K. In the end, only 100 units made it into the hands of customers. Chevrolet managed to recall all of the sold vehicles and destroyed them (except for two that survive to the present-day). Kettering threatened to leave GM over the episode, but was convinced otherwise. The project consumed extensive R&D resources but, in the end, proved to be an unmitigated failure.

Top: cut-away view of cooling fins

Bottom: engine air-cooling diagram

1094



1095

After All

1096

"...They don't use air cooling today because it would mean the expense of retooling and selling the idea to the public, and because of the inherent inertia that hinders all progress. After all, when you've got something that works and sells, why improve it?..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1097

"...Air-cooling will mean far less weight, getting away from all the complicated plumbing, water pump and radiator. There will be no cracked heads or blocks when you forget to put in anti-freeze..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1098

The New Tucker

1099

"...The battery on the new Tucker will be 12 volt. We planned a 12-volt system for the original Tucker and were criticized because we ended up with a six-volt system. The reason was that at that time we couldn't get parts and accessories for a 12-volt system at prices we could afford to pay. Now, eight years later, the industry admits we were right, and almost everybody is going to 12 volts..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1100

"...Suspension will be independent as before, because there isn't a better ride on any car here or abroad than independent, four wheel suspension. Ask Packard, which is reported to be extending this feature to its entire line..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

Above: excerpt from a 1956 Packard brochure

1101

"...TORSION-LEVEL RIDE takes you over the bumps and ruts of the most time-worn, weather punished road with a flight-level smoothness that beats riding on air! What's more, Torsion-Level Ride adds in equal measure to your comfort and safety on any road - starting, stopping, cornering! Through sweeping curves, over rugged railroad crossings, at road junctions where you must turn tight and fast...through these and all other driving situations. Torsion-Level Ride gives you control, handling ease and stability no other car with conventional coil and leaf springs can match! Not only do drivers and passengers ride relaxed (because the torsion bars have absorbed rather than just cushioned, road shocks due to up-and-down movement) but car life is also increased..."

RE: excerpt from a 1956 Packard brochure

1102

Above L&R: caption: "Heart of the Load Levelizer is a unique power-controlled motor connected to torsion bar system. It keeps the Packard and Clipper always at 'design height' - the height at which they were designed to ride and look their best! No matter what the passenger or luggage load, the Load Levelizer System will automatically compensate for the weight, within seven seconds of loading, raising or lowering the car to the proper level or 'design height.'"

1103

"...The engine, as before, is designed for fast, simple installation and removal. In a demonstration with one of the first Tuckers, the engine was removed and replaced in 15 minutes..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1104

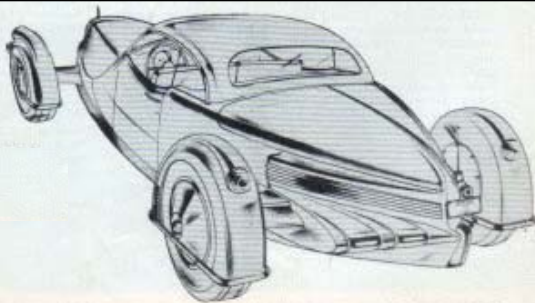


1105

"...Except for standard accessories like the coil, generator, starter, etc. we will have, insofar as is humanly possible, only one size bolt and cap screw so you can remove and disassemble the entire engine-transmission with one torque wrench. Open the rear deck, pull up a chair and you can get at every major part and accessory of the power plant without tearing of half the body like most of the cars today..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1106



Above: caption: "Air cooled engine in rear will be easily removed. With the rear deck open, the engine could be worked on almost from a chair. Tucker claims that the car industry has taken six years to catch up with the innovations he designed into his first car. New car, he claims, will have many more surprises."

1107

"...We're going to hold down the wheelbase as far as possible without sacrificing space. The tread will be standard, not narrow like in European cars. A car that is so long and wide that you can't park it, and can hardly squeeze past in your garage, is no great bargain no matter how pretty it looks. We will build a practical vehicle at a fair price, that is light enough so you don't need power steering..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1108

"...Our aim is a good serviceable car at a price lower than the lowest present standard priced cars. And if you want the luxuries there will be provision so that they can be added. There is no automobile built in this country today that meets these standards, and the only two that even approach it are so small and cramped that a full sized man can hardly get in, and the back seat won't fit anybody but midgets..."


RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1109

"...Speed will be better than 100 miles per hour. We built this into the original Tucker, but nobody believed it. Today it is commonplace. Brakes will be the best we can get, probably disc brakes which we didn't have the time or money to develop to our satisfaction the first time. And our main objective will still be safety - a padded dash, the same pop-out windshield, and a steering wheel and column that will give, instead of killing the unfortunate driver who happens to be behind it..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1110



"...Gas mileage will be 30 miles per gallon or better, with the lightweight air-cooled engine giving a far better weight-to-horsepower ratio. In controlled tests, the original six-cylinder Tucker exceeded 25 miles per gallon at an average of 45 miles per hour, and averaged close to 20 miles per gallon from 80 to 90 mph. the new Tucker should be substantially better..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1111

So Much for the Car

1112

"...So much for the car. The manufacturing and sales plans are revolutionary! But I am not free to say what they are. I can only say that with the new plan, \$2,000,000 or less, would put us in business. The first time we would have needed at least \$30 million after our credit was shut off..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1113

With Good Reason

1114

"...To anyone with the brains of a bat there can be little doubt that most of the automotive industry, or at least a substantial part of it, was behind the hysterical campaign that finally succeeded in closing us down in Chicago. And there is likewise no doubt in my mind that when we start our new operation, they will be in there swinging. And this time with good reason..."

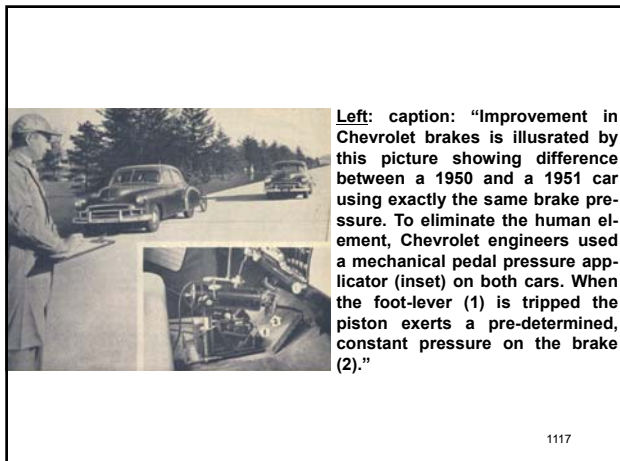
RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1115

"...It has taken the industry six years to even approach the innovations we designed into the original Tucker automobile, and they are just now getting into the safety parade that we led. If they are slow next time as they were before, it will take them 20 years to catch up with us after we get going again. Because next time we're going to have a double advantage..."

RE: excerpt from an article written by Preston Tucker entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1116



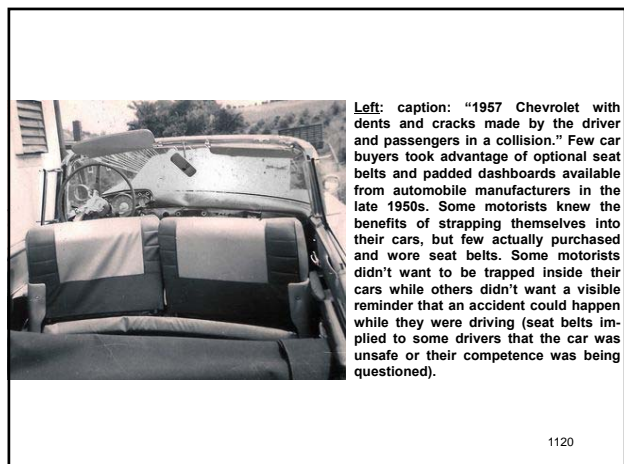
1117

The *Ford Motor Company* launched a major advertising campaign for its "Lifeguard Design" package on 1956 *Ford* and *Mercury* cars. A dish-shaped steering wheel, clustered knobs and instruments and stronger door latches were standard equipment. At additional cost, motorists could order lap belts, a padded dashboard, padded sun visors and a shatter-resistant rear view mirror. Sales were brisk at first but soon were outpaced by the 1956 *Chevrolet*, which sported new styling and optional lap belts, shoulder harnesses and a padded dashboard. *Robert McNamara*, General Manager of the *Ford Division*, believed that manufacturers had a moral obligation to study safety issues, develop protective safety hardware and educate consumers. He also believed that life protection would sell cars. The *National Safety Forum* (a two-day conference in 1955 with crash tests and announcements of new safety features on the 1956 cars) was FMC's attempt to raise the profile of auto safety research and generate interest in the public domain.

1118



1119

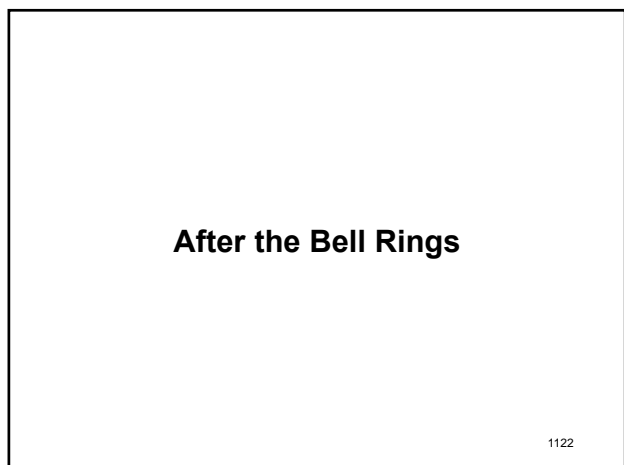


1120

New Cars with Optional Seat Belts in New York City, 1955-56

<u>Make</u>	<u>Cars Equipped with Seat Belts</u>
Buick	0.25%
Chevrolet	0.3%
Ford	3.0%

1121



1122

"...First we have improvements that we aren't telling anybody about until the last minute. And, finally, we still remember a lot of things we learned last time - what you can expect when the referee isn't looking and what to do when you see a punch coming after the bell rings..."

RE: excerpt from an article written by *Preston Tucker* entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1123

"...For more than five years now I have been trying to put this new deal together. Always there has been the disadvantage of having failed before. That bigger men than I failed in the same way doesn't seem to count. Henry Ford failed once, as did William Durant, R.E. Olds, who will be forever one of the greatest names in automotive history, lost Oldsmobile, to start again and build REO, one of the most respected names in the industry..."

RE: excerpt from an article written by *Preston Tucker* entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine. A member of a select club which included the likes of *Henry Ford*, *David Dunbar Buick*, *Horace and John Dodge*, *Louis Chevrolet* and *Walter P. Chrysler*, *Ransom Eli Olds* has the unique distinction of having given his name to not one, but two makes of automobile (*Oldsmobile* and *REO*). *R.E. Olds* learned mechanical engineering from his machinist father and built his first gasoline engine in 1895. Two years later, he founded the *Olds Motor Vehicle Company*, along with his uncle *Samuel L. Smith* and cousin *Frederic Smith*, with the objective of building cars that would use his engines.

1124



"The time will come when the horse will be relegated to comparative discard. Men will travel from town to town in a vehicle driven by power machinery at a speed of at least thirty miles per hour. Soon every house will add an automobile room to shield their horseless carriage. Barns with their odors from horses will disappear from the city."

R.E. Olds. 1896

RE: more than any other figure in automotive history, *Preston Tucker* looked to *Ransom Eli Olds* (left) as a kindred spirit - a man who, undaunted by the obstacles placed in his path, kept his eyes on the prize he sought

1125



1126

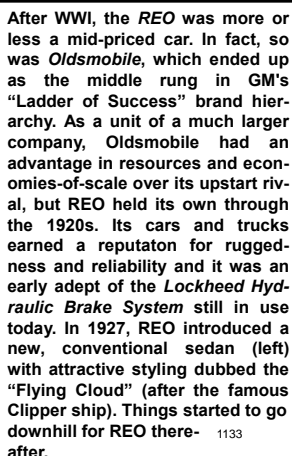
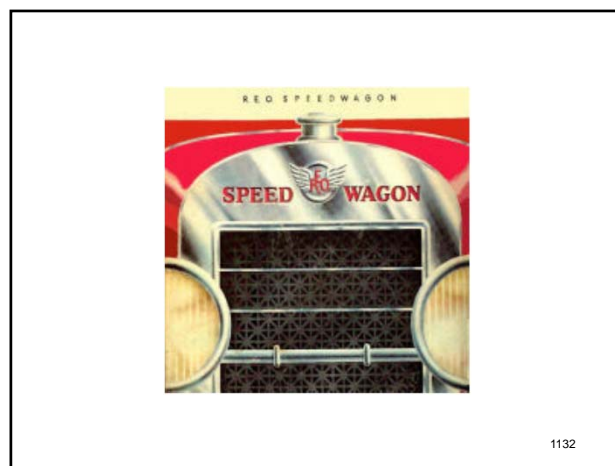
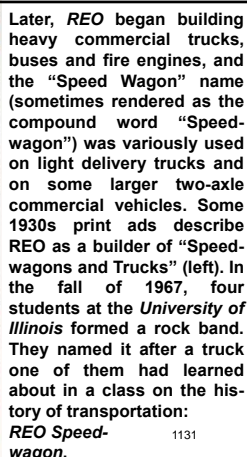
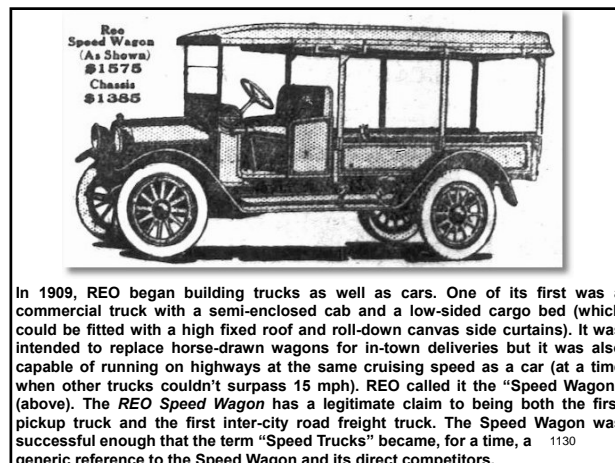
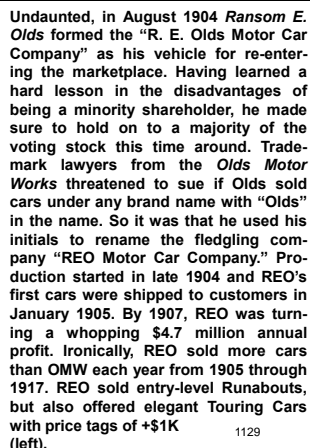


Built on an assembly line, the 1901 *Oldsmobile Model R1 Curved Dash Runabout* was, arguably, the first truly mass-produced automobile (the "Curved Dash" nickname was derived from the shape of the dashboard, which is a dashboard in the original horse-drawn vehicle sense: a shield to keep mud and dust from flying up and hitting the driver in the face, making it a true "horseless carriage"). Contrary to popular belief, the *Ford Model T* was not the first car built on an assembly line, but it was the first to use a *powered* assembly line. In celebration of the popularity of the Olds Curved Dash Runabout, in 1905 composer *Gus Edwards* and lyricist *Vincent P. Bryan* published "In My Merry Oldsmobile," a parlor music waltz (left).

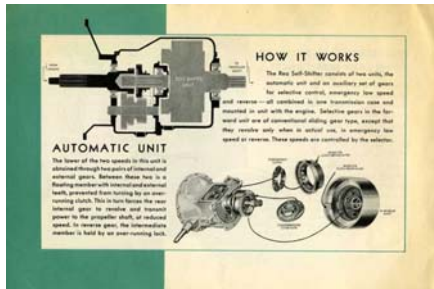
1127

The popularity of the *Oldsmobile Curved Dash Runabout* led to a dispute between Olds and his two partners that would have faithful consequences. Uncle Sam and Cousin Fred wanted to take the *Olds Motor Works* up-scale and while R.E. Olds saw the future of his namesake company in the mass production of entry-level vehicles (like the Runabout). Since Uncle Sam owned the most shares of the company's stock, he won the argument. R.E. Olds was forced out of the company he helped found in 1903. OMW stayed under the control of *Samuel L. Smith* until it was sold to *General Motors* in 1908.

1128



Richard H. Scott, who had succeeded R.E. Olds as REO's president in 1915, decided to expand REO beyond its traditional mid-market niche and develop a full line of cars. Starting in 1925, the company made considerable investments in product development and plant expansion to accommodate its enlarged product line. However, in October 1929 the stock market crashed. REO, like many others, expected the economy to recover quickly and so it pressed on with the rollout of its next new model - the Royale 8, he grandest REO to-date. In a contracting economy, it was the wrong car to be offering in 1931. REO had a second big project which came on the market in 1933; the "Self-Shifter" transmission (standard on Royales but an \$85 extra-cost option on the Flying Cloud). This was one of several "semi-automatic" gearboxes developed in the 1930s, precursors to the fully-automatic transmissions of today. The Reo Self-Shifter had a conventional clutch, which "let out" in the usual fashion when starting from rest. The transmission had two planetary gear sets and once moving, it automatically switched from low gear to high based on road speed, with no need to use the clutch again until stopping. Though a clever piece of mechanical engineering, the Self-Shifter was never popular enough to recover the \$2 million REO had spent developing it.



1135

Sales of *REO* automobiles fell well below the break-even point, however, through all the turmoil, the truck business kept REO afloat. Though truck sales had declined, the truck line recovered faster and managed to turn a profit in the lean years of the *Great Depression*. After a series of executive-level shakeups, *R.E. Olds* came out of retirement to try and help the situation. Sales of the REO automobile line rose somewhat in 1934 and the company actually made a small profit in 1935. Even so, REO was selling less than 5K cars per year. The business case for getting out of the car business and concentrating on trucks was too compelling. Thus, the 1936 *Flying Cloud* was the last REO automobile. GM continued to build Oldsmobiles until 2004, when the brand name was retired.

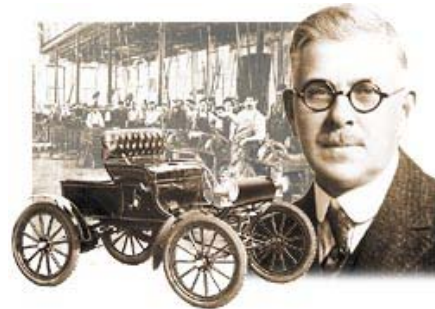
1136

The tradition with a future

ROYALE
By DIAMOND REO

After *R.E. Olds* died in 1950, *REO* underwent a bankruptcy reorganization and was sold a few times, ending up as a subsidiary of *White Motor Company*. Ten years later, White acquired another truck manufacturer; *Diamond T*. White merged its two subsidiaries to form "Diamond Reo Trucks, Inc." *Diamond Reo* went bankrupt in 1974 and was liquidated under court supervision. The brand name and trademarks have passed through a succession of owners who've done business under variations of the name "Diamond" (one of these firms built about 150 "Diamond Reo" trucks per year through the mid-1990s).

1137



1138

If All Else Fails

1139

"...Some of the deals that I have worked on have almost made it. One of these days you'll be hearing about the deal that went through successfully. It may even be that I will have to start in another country. There have been offers but I have been reluctant to accept them. I love my country and I believe I have had a part in building it. I will leave it only as a last resort..."

RE: excerpt from an article written by *Preston Tucker* entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1140

"...But when government agencies become the tools of private monopoly, individual initiative and enterprise are doomed. Automotive competition must continue at all costs if the American car consumer is to get the most for his money..."

RE: excerpt from an article written by *Preston Tucker* entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1141

One of These Days

1142

"...So, watch for me and the new Tucker car, One of these days we'll be rolling down the highway and the head of every motorist will be turned admiringly in our direction. That Tucker car will be the answer to an American Dream..."

RE: excerpt from an article written by *Preston Tucker* entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1143

I Never Will!

1144



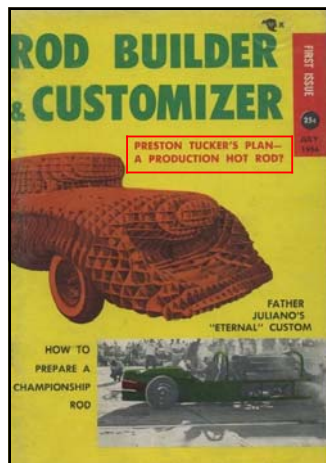
"...I never gave up. I never will!"

RE: excerpt from an article written by *Preston Tucker* entitled *I Never Gave Up*, which appeared in the December 1955 issue of *CAR LIFE* magazine

1145

A Family Hot Rod?

1146

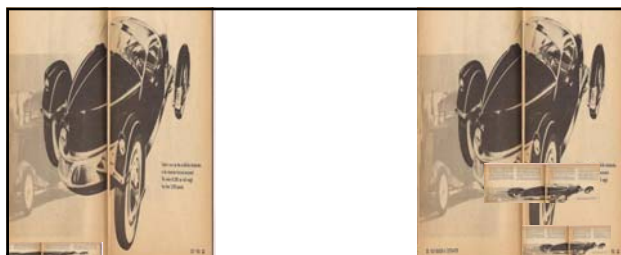


"Is Preston Tucker's secret new car a hot rod? That's the question which rodders all over the country are asking right now..."
 ROD BUILDER & CUSTOMIZER, July 1956

1147

"...Just a few months ago, Preston Tucker announced to the automotive world that he planned to be back in business soon. This man - who had startled Detroit with his fantastic post-war plans for the Tucker Torpedo, who was acquitted of charges of criminal conspiracy when the plans collapsed, who has since been a constant thorn in the side of the traditional-thinking Detroit - revealed his newest idea in the consumer auto magazine CAR LIFE..."
 ROD BUILDER & CUSTOMIZER, July 1956

1148



"...On the cover was a rendering of the car by famed designer Alexis de Sakhnoffsky - one of the drawings shown on these pages. And hot rodders who saw it recognized a real relationship between the new Tucker and the world of rodding and customizing..."
 ROD BUILDER & CUSTOMIZER, July 1956

Above: caption: "Tucker's new car has a definite relationship to the American hot-rod movement. The under-\$1,000 car will weigh less than 2,000 pounds."

1149

"...Preston Tucker would be the last one to deny that relationship. As a self-tught car bug who started tinkering with internal combustion machines before they emerged from makeshift garages, he recognizes the great contributions to automotive progress which rodders and rodding make every day. And he is aware that many people, including certain close associates, are even now referring jokingly to his car as a 'family hot rod'..."
 ROD BUILDER & CUSTOMIZER, July 1956

1150

Just the Facts

1151

"...What facts about Tucker's auto could we uncover? Because he has had too much experience with people who don't want to see him get into production, Tucker says that he is being especially wary this time about letting out the complete story. But this much he will divulge..."
 ROD BUILDER & CUSTOMIZER, July 1956

1152

"...The engine is a rear-mounted, four-cylindered, horizontally opposed with forced air cooling for extremely hot weather and idling. Four-wheel independent suspension is also in the books for the Tucker job. There'll be disc brakes, a 114-inch wheelbase, and a total weight under 2,000 pounds. Sakhnofsky's drawings reveal fenders mounted on the wheels, which turn with the wheel's movements. But, Tucker implies that this development may be discarded..."

ROD BUILDER & CUSTOMIZER, July 1956

1153

"...One fact Tucker states emphatically - the entire powerplant, except for a few standard accessory parts - will have only one size bolt and cap screw so that the whole engine-transmission can be disassembled with one torque wrench!..."

ROD BUILDER & CUSTOMIZER, July 1956

1154

Rumor Mill

1155

"...There are many rumors trickling out of Ypsilanti, Mich., where Tucker lives and works. Some of them are astounding - so astounding that ROD BUILDER & CUSTOMIZER wants it to be understood that it does not vouch for them. And Tucker, who is understandably wary, refuses to deny or confirm them..."

ROD BUILDER & CUSTOMIZER, July 1956

1156

"...The most often repeated one concerns the price. Under \$1,000! Then there's a story that the car will be sold in kit form - available complete or in part. This would enable skilled enthusiasts to purchase only what they want and allow them to modify as they see fit. Another rumor indicates that the shell will start a whole new trend in rodding because it will bring the hobby closer to the mechanically-minded but less-skilled enthusiasts. According to a final rumor at least 25% of the parts will be available in regular speed shops and accessory stores - standard stuff..."

ROD BUILDER & CUSTOMIZER, July 1956

1157

Wait and See

1158

"...Whether these stories jibe - and what percentage of them are true - are questions we can't answer. Ask Preston Tucker and you'll get a knowing smile and just a few words. The words? 'Wait and see.'"

ROD BUILDER & CUSTOMIZER, July 1956

1159

Part 9

Where Have All the Tuckers Gone?

1160


A Magnificent Failure

1161

"It is a story that has been repeated many times: a car company is founded by a larger-than-life visionary with unconventional ideas. It goes on to create remarkable vehicles. This story can have many different endings. Some of the plucky startups, like Ferrari and Honda, endure, and their cars become the stuff of legend. Many more - Bricklin and DeLorean, for example - drop out of sight before gaining a commercial foothold..."

The New York Times, July 24, 2009

1162



THE LAST OF THE INDEPENDENTS

"...Among the failures is one of the most fascinating chapters of American automotive history, the story of Preston Tucker and his attempt to break into a market dominated by Detroit's Big Three in the years after World War II..."

The New York Times, July 24, 2009

Left: caption: "Finally a game for the 'thinking' car enthusiast! The Last of the Independents uses a Euro-style game experience to challenge the entrepreneurial spirit in us all, challenging players to help the Post-War American Independents (Studebaker, Willys, Kaiser, Nash, Tucker etc.) make a go of it in a market dominated by Detroit's Big Three."

1163

"...While much of the Tucker saga is steeped in myth and intrigue, a great deal is known about the 1948 models Tucker actually produced: one hand-built prototype, known as the Tin Goose, and 35 of the sleek Tucker 48 sedans, best remembered for their distinctive third headlight in the center of the front end that was designed to swivel with the steering. During the 1950s, 16 more of the cars were assembled from leftover parts. These later vehicles, built using factory designs and specifications, are widely accepted as the genuine article, barely less sought-after than any of the originals. All told, 46 of the Tucker four-door sedans are believed to remain. Surviving Tuckers are worth amounts approaching, and in some cases, exceeding \$1 million..."

The New York Times, July 24, 2009

1164

"...Though only 50 pilot cars were built, an astonishing 47 remain (and the hand-built prototype 'Tin Goose'). For the record, the missing cars are No. 1018 (crashed); No. 1023 (burned in a warehouse fire) and No. 1027 (rolled during factory testing and sold 'as is' at the bankruptcy auction). Then there's No. 1035, which sold to a dealer in Brazil in 1948 and is still tied up in probate..."

Chicagotribune.com, February 1, 2011

1165

In addition to the *Tin Goose* prototype, 50 Tuckers were produced at the Tucker factory in Chicago. By November 2, 1948 cars through serial number 1035 were complete and cars 1036 through 1042 were waiting for transmissions. According to the records, after the auction there were 58 Tucker bodies completed when the plant closed (47 of the original 50 Tucker 48s exist today). Tucker 1051 was not completed at the Tucker factory thus, it's not technically considered one of the original 51 cars. Tucker Body No. 54 was purchased at the Tucker auction by the *Poll Museum* (in Zeeland, MI) in an incomplete state. Poll also purchased engine No. 33584 that had been in Tucker 1027 when it rolled during testing at the *Indianapolis Motor Speedway*. For many years they attempted to build it into a Tucker but gave up and sold it to a person in New Jersey who completed it in the late 1980s.

1166

No. 1035

1167

TUCKER

Distribuidores exclusivos nos Estados de S. Paulo, Paraná, Santa Catarina e Rio Grande do Sul

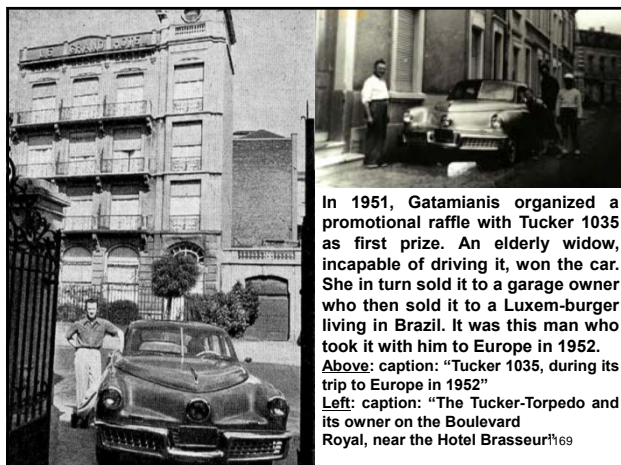
Automoveis TUCKER de S. Paulo

Rua 7 de Abril, 252 - 5.º andar - Fone 4-9909 - End. Telegr.: "TUCKER" - S. Paulo

Tucker No. 1035 was sold to *Jamie Gatamianis* of Sao Paulo, Brazil (Gatamianis was a Brazilian Tucker distributor). Rumor has it that *Preston Tucker* shipped a second *Tucker 48* to Brazil and that it remained in the country after he died in 1956. Because of this rumor, many believed that Tucker 1035 was the car Tucker had brought with him to Brazil. However, Tucker's son, *Preston Tucker, Jr.*, has confirmed that his father never brought a second car to Brazil.

Above: an ad for Gatamianis' Brazilian Tucker dealership from 1948

1168

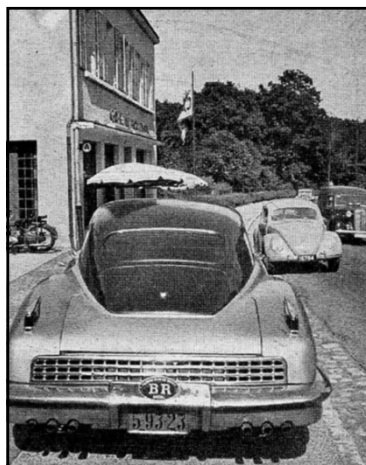


In 1951, Gatamianis organized a promotional raffle with Tucker 1035 as first prize. An elderly widow, incapable of driving it, won the car. She in turn sold it to a garage owner who then sold it to a Luxemburger living in Brazil. It was this man who took it with him to Europe in 1952.

Above: caption: "Tucker 1035, during its trip to Europe in 1952"

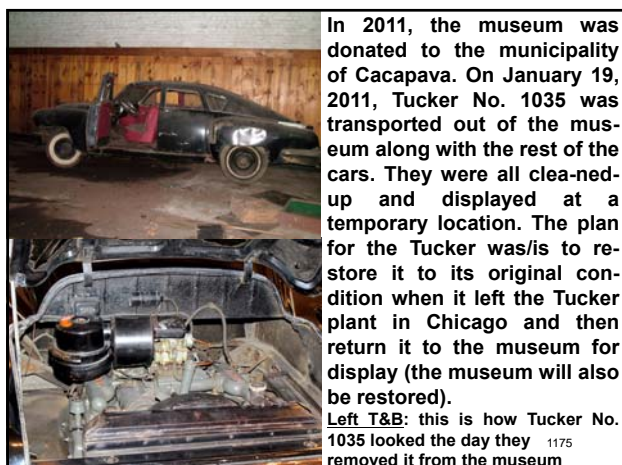
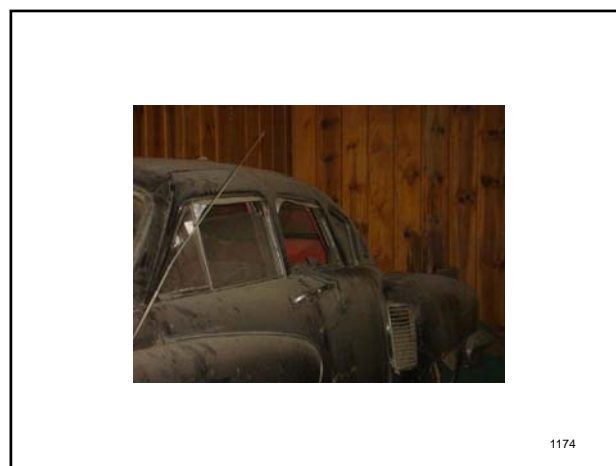
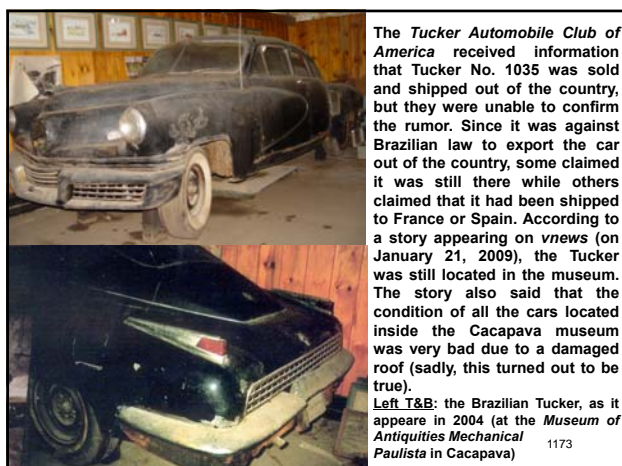
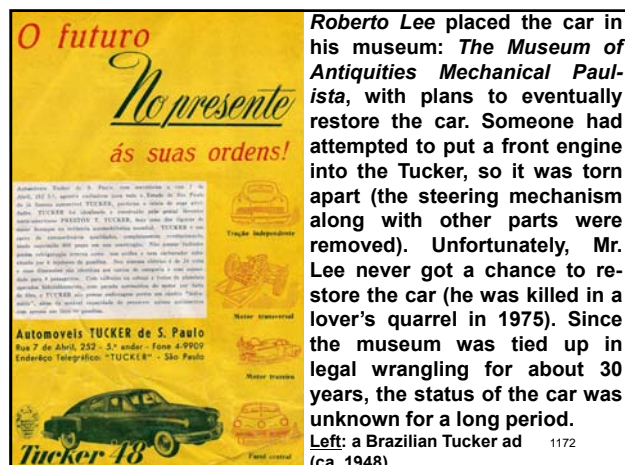
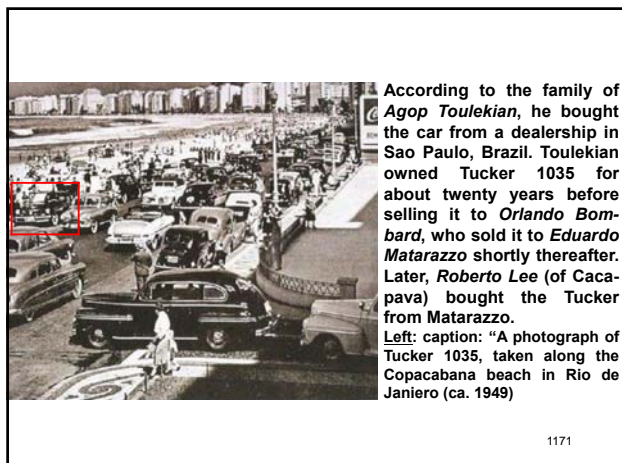
Left: caption: "The Tucker-Torpedo and its owner on the Boulevard Royal, near the Hotel Brasseur"

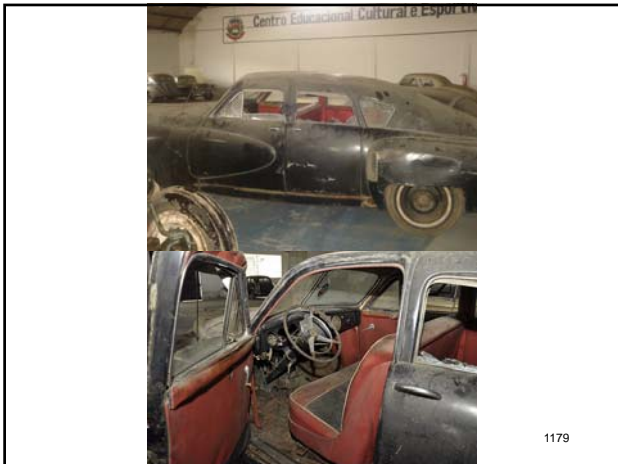
1169



Left: caption: "The Tucker-Torpedo in front of the Cafe des Boulevards, Boulevard General Patton"

1170







1183



Top Left: caption: "Tucker 1003, stripped down to the metal"

Top Right: caption: "Tucker 48 - 1043 as it looked before it was restored"

Left: caption: "The unre-restored front-end from Tucker No. 1018"

1184



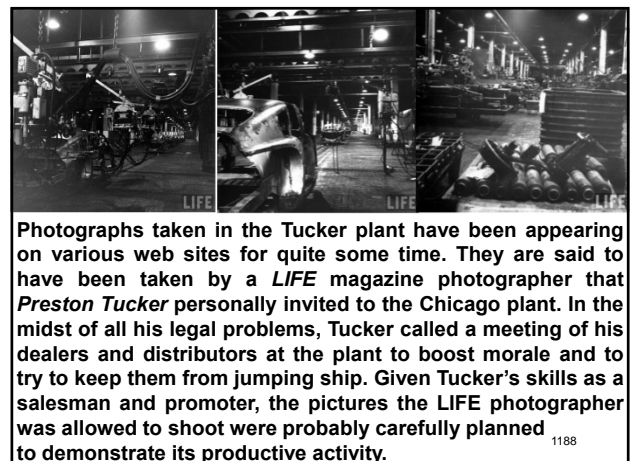
1185



1186

Body No. 57

1187



Photographs taken in the Tucker plant have been appearing on various web sites for quite some time. They are said to have been taken by a *LIFE* magazine photographer that *Preston Tucker* personally invited to the Chicago plant. In the midst of all his legal problems, Tucker called a meeting of his dealers and distributors at the plant to boost morale and to try to keep them from jumping ship. Given Tucker's skills as a salesman and promoter, the pictures the *LIFE* photographer was allowed to shoot were probably carefully planned to demonstrate its productive activity.

1188

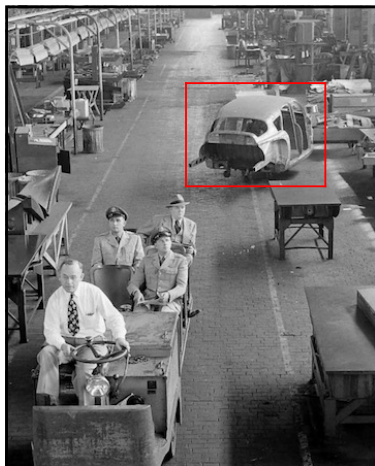


1189



When the Tucker factory was closed, there were eight body shells on the production line awaiting completion. One of them, No. 51, was closer to being finished and a Tucker employee scrounged enough parts from inside the factory to complete it, making for a total of 52 complete cars. If the first body shell in the line is assumed to be No. 51, then the missing body is No. 57.

1190



Pictures taken elsewhere in the plant show another Tucker sitting by itself. A closer look reveals that this Tucker has a larger rear window than the others. In fact, Alex Tremulis talked about working on a 1949 prototype for Tucker and that one of the design changes was to be a larger rear window. Tremulis undoubtedly was working on the No. 57 body shell.

Left: caption: "Tucker Body No. 57"

1191



According to factory records, there were 58 Tucker bodies completed when the plant closed. Body No. 57 was being worked on by Alex Tremulis in the styling department. When LIFE magazine gave the public access to its photo archive in 2008, photographs were found of a Tucker featuring a wrap-around rear window and some modifications to the front fenders. This car is believed to be Body No. 57.

Above: caption: "Tucker 48 Body No. 57 - at the Tucker Auto Plant September 9, 1950"

1192



Rumors have circulated for years about a Tucker convertible being worked on in the styling department of the Tucker factory. According to Alex Tremulis, no such car was ever built. Pictures of a Tucker convertible that is claimed to be body No. 57 that Alex worked on has been circulating the internet for quite some time. Some claim it is the genuine article, while others trace the car back to the Tucker auction where a former employee bought a body shell that he attempted to turn into a convertible. According to Tucker historians, that body was body No. 55.

Left: caption: "Tucker 48 - Body No. 55"

1193



Above L&R: caption: "Here are a couple pictures I got in the mail yesterday from a friend of mine who once owned Tucker No. 55. He says he also had the frame but these are the only pictures he has of the car. The frame was leaning up against the garage when he took these pictures. He wrote the following: 'Tucker No. 55 was sitting outside and a tree fell on it. I bought it from Stan Gilliland of Wellington Kansas about 1977 and owned it till 1979. I got some of the parts from Stan's place and the door jam from a field near Kansas City. I sold it because it was beyond my restoration capability at the time. After running a restoration shop for 20 years, I could now do something with it. Of course, I wish I had kept it. Oh well, we all have regrets.'"

1194

Project Vera

1195

"...Over the years, there had been whispers here and there, a few mentions in books and articles, about a mysterious convertible that Tucker and his crew had started working on in the days before he was forced to shut down operations in 1949. But that's all they were, just tantalizing hints. Few people knowledgeable about Tucker's history took the stories seriously..."

The New York Times, July 24, 2009

1196

In February 2009, a Tucker convertible was listed for sale on ebay by *Benchmark Classics* with a \$1 million starting price (it had a buy-it-now price of \$5 million). The car was presented as "Project Vera" - a project that was being worked on in the experimental department when the Tucker plant closed down. According to the listing, a former Tucker designer was once interviewed about *Project Vera* years after the plant closed. One of the questions that he was asked was: "Was there a Tucker convertible project ever started at the Tucker plant?" He responded: "Yes, but I thought that the project had been scrapped when the plant closed."

1197



"If you want to start a fight, just log onto any Web site where Tucker automobile buffs hang out - www.tuckerclub.org is a good place to start - and start asking around about the existence of a Tucker convertible. Then put on your helmet and protective cup and wait for the sparks to fly..."

oldcarsweekly.com, January 22, 2009

Left: the controversial Tucker as it appeared after many hours of restoration work. Benchmark Classics, of Madison, WI, had two employees working full-time to complete the project by May 2009. Convertible top down (at top) and up (at bottom)

1198

"...The widespread doubt added to the surprise that Justin Cole, a classic car restorer in Madison, Wis., felt at a car show last September when a collector mentioned to him a pending deal involving a Tucker convertible. In this complex swap, the collector, Allan Reinert of Burlington, Wis., was to transfer the convertible Tucker to another collector in return for cars and cash. A 1957 Corvette that Mr. Cole was trying to sell was part of the transaction. The man who wanted the Tucker would be sending Mr. Cole a check for the Corvette, which Mr. Cole would then deliver to Mr. Reinert as partial payment for the Tucker convertible..."

The New York Times, July 24, 2009

1199

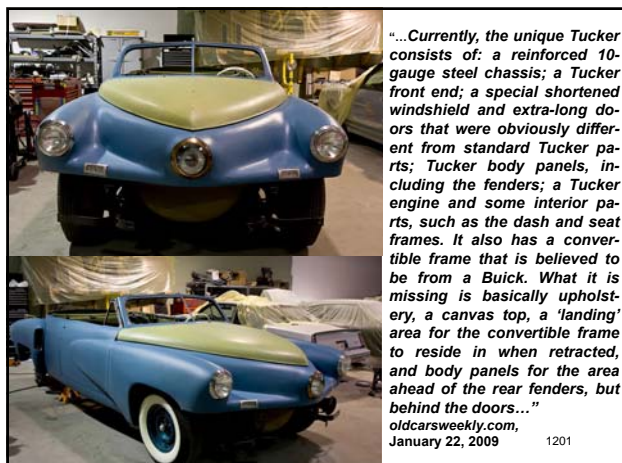


"...I had never heard of a convertible Tucker,' Mr. Cole said, 'so I asked him to tell me more about it, and the more he went into the details, the more he caught my attention - things like the correct Franklin engine and Cord transmission, and a frame made of the thickest steel of any Tucker in existence. I wanted to believe what he was telling me, but it was very hard to believe. So I went out to Allen's place and looked into his garage. I saw what I needed to see'..."

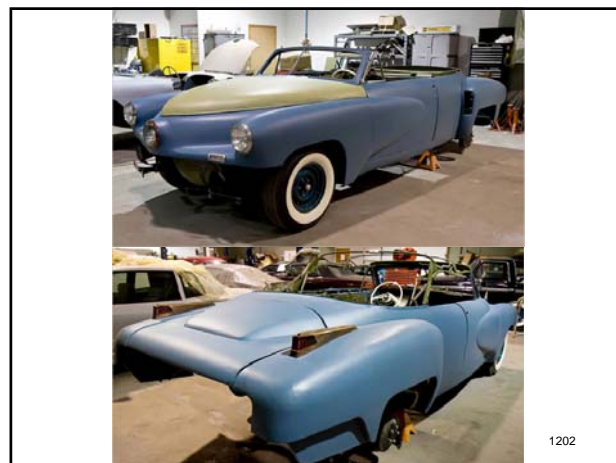
The New York Times, July 24, 2009

1200

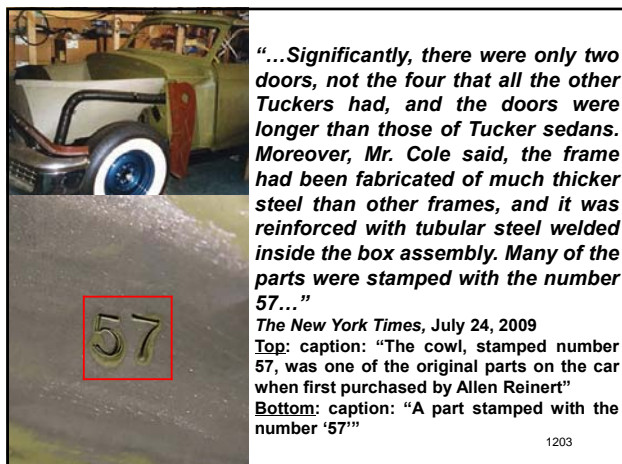
Above: the mysterious Tucker - as it appeared when purchased by Benchmark Classics



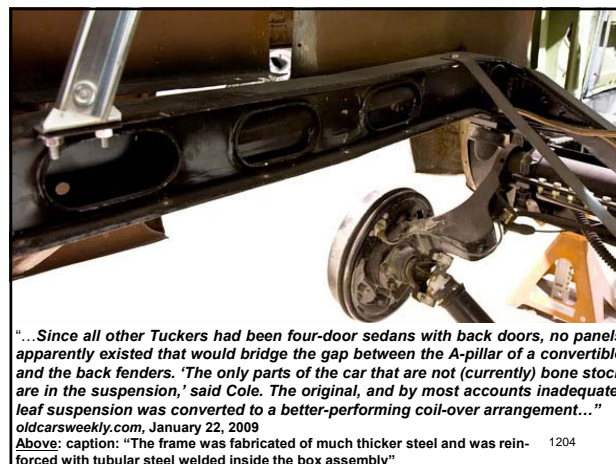
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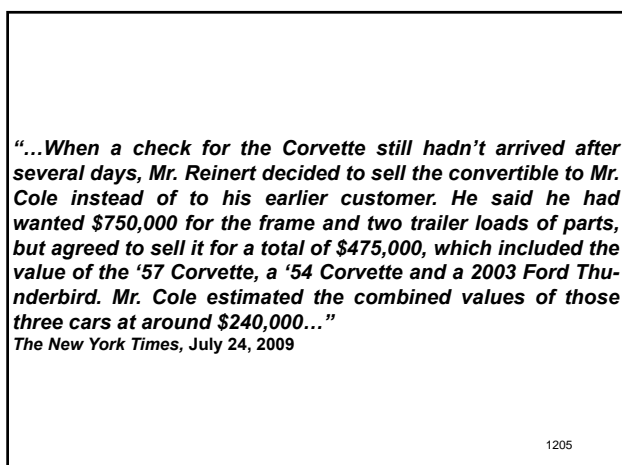
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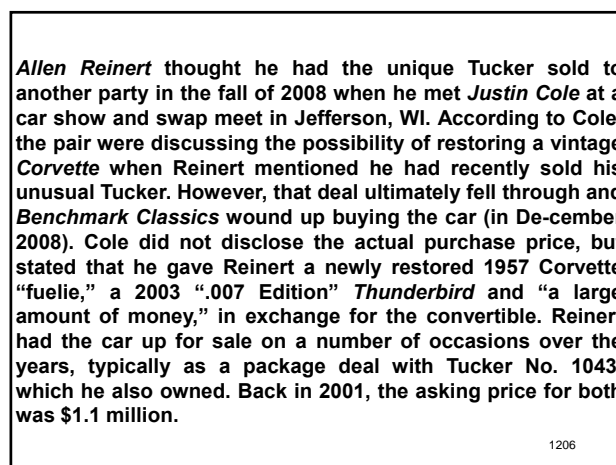
1203



1204



1205



1206

"...Since then, Mr. Cole and his crew have put about 1,500 hours into restoration of the car, working with the parts that came from Mr. Reinert. A few sheet-metal panels at the rear of the body, including the decklid and a filler panel, had to be fabricated. Mr. Cole said he anticipated finishing the car in August and showing the car on Sept. 13 at the Fairfield County Concours d'Elegance in Westport, Conn..."

The New York Times, July 24, 2009

1207



1208



Above: caption: "WORK IN PROGRESS - Justin Cole with the Tucker convertible and powertrain"

1209



1210



Justin Cole, the auto restorer whose shop (left T&B) completed the Tucker convertible, has photographs of body panels of the convertible showing the number "57" stamped inside, proof, in his mind, that the convertible is the same car that Alex Tremulis was working on. Others aren't so sure. Tucker fans who doubt the authenticity of the convertible believe that the numbers were stamped on the body panels long after the factory was closed and are, in fact, fake. Some of these same people believe that the convertible was fabricated from Tucker Body No. 55. One thing that is clear is the fact that no Tucker with an enlarged, wrap-around rear window was ever seen after the LIFE factory photos appeared.

1211



"...The closer his shop, Benchmark Classics, gets to completing the restoration, the louder the chorus of doubters becomes, with some of the most vocal objections being raised on the forum of the Tucker Automobile Club of America's Web site, tuckerclub.org..."

The New York Times, July 24, 2009

Above: caption: "A sketch of how the car will look when completed"

1212

"...Many participants in that forum say they believe that Preston Tucker never intended to produce a convertible and that Mr. Cole is engaging in an elaborate hoax. Both Mr. Cole and Mr. Reinert say they are surprised at the vehemence of the objections. They say they have eye-witness accounts, some in the form of affidavits that have been posted on a Web site created for the convertible project at tucker-convertible.com, from people who had seen the drawings, reinforced frame, factory number stampings - and the car being prepared as a convertible - long before Mr. Reinert acquired it..."

The New York Times, July 24, 2009

1213

"It was built off-the-books. Preston Tucker had a lot of secret projects going on...I was told this was 'Project Vera.' No. 57 went into experimental department under the direction of Robert McClelland. They took this body shell into the experimental department and the first thing they did was cut the roof off...They hung it off the ground and had weights where the motor and transmission and battery would be...They had a 16-gauge frame that was flexed. The strength was gone because the roof was cut off...So they made a new frame that was twice the thickness. They tack-welded the cowl...They were turning a four-door sedan into a two-door convertible. This is a uni-body car, so I can see why they did what they did with the frame..."

Allen Reinert (2009)

1214



"...One such person, John Walczak, a 60-year-old retired banker from Woodstock, Ill., said he had seen the uncompleted car as a convertible in a Milwaukee machine shop in 1971 or 1972. Also, he said, he saw full-scale engineering drawings - bearing the stamp of the Tucker Corporation - of the car as a convertible..."

The New York Times, July 24, 2009

Left: caption: "The odometer indicated zero miles"

1215

"...Then, this is when the Securities and Exchange Commission started doing their investigation...Joseph Lencki told me that...The car left the experimental department, went to Lencki Engineering, until all the money dried up, and he didn't work on it anymore...It sat there for a number of years, and when Lencki went out of business, it went to a former employee, then eventually to another former employee. I talked to a lot of people, and had chance to interview McClelland. He told me what he could - that there was a short period that he did work on the car. And that's pretty much it. It had no motor, no transmission, no steering, no tires or wheels. No nothing. After I found the car I started scrounging parts..."

Allen Reinert (2009)

RE: Reinert stated that when he acquired the car, it was basically a frame with a cowl tack-welded in place, two front doors and two rear quarter panels

1216

"...Jerry Renner, now the owner of a motorcycle shop in Arbor Vitae, Wis., said that Mr. Reinert had brought the frame and body parts for restoration help in the late 1980s. Mr. Renner added that while the project was in his shop, he had been visited by two former Tucker employees who recognized it as an experimental convertible begun in the Tucker factory months before it closed..."

The New York Times, July 24, 2009

1217

"...I bought everything he had, and with that, I was able to get the car as far as I did. But I still couldn't afford the \$50, \$60, \$70 dollars an hour (at a restoration shop) when it came down to it (completing the car). I've had it for over 25 years, and I stopped working on it a good 7-8 years ago. I'm 68 years old, I've got diabetes, and I just decided that I can't work on it anymore..."

Allen Reinert (2009)


RE: Reinert began networking in Chicago, Milwaukee and elsewhere and, eventually, purchased a large stash of parts from an Illinois collector. He said the parts had once been part of an October 1950 auction.

1218



"...Mr. Cole said that his car was no different in authenticity from any of the 16 Tuckers built from leftover parts after the factory closed, and that it should be seen as the legitimately final chapter in the strange story of Preston Tucker's attempt to create a competing automobile brand in the United States. 'In a way, I am a little like Preston Tucker himself,' Mr. Cole said. 'It seems like everyone is against me, but I will not back down. I will finish this project.'" 1219

The New York Times, July 24, 2009



Tucker

Automobile Club of America

"The Tucker Automobile Club of America, Inc. (TACA) has never been presented with - nor have been able to find - any credible evidence to prove the authenticity of this or any other vehicle as being a Tucker Corporation intended convertible and therefore we can not certify it as such."

RE: the controversy regarding the Tucker convertible will probably never be settled. True believers will continue to buy the story that the convertible was a secret project within the Tucker factory; that it was lost to history for a time and then found and restored. Non-believers, especially the Tucker Automobile Club of America (TACA), are absolutely convinced that no such project was ever undertaken by the factory and that the Tucker Convertible is a very good custom fabrication, both literally and figuratively. 1220



(Tucker Automobile Club of America)

1221

"Those of you scratching your heads, sit tight, as all will be explained. In March of 1949, the last of the 51 Tuckers ever built rolled off the Chicago-based assembly line. Preston Tucker's vision for a great American automobile was dead. Undeniably beautiful, wildly powerful (377 pound-feet of torque made for quite a barnstormer at the time) and a couple of decades ahead its time (safety innovations, driver-centric controls, an active headlight), the Tucker Torpedo stands as a monument to what could have been, but simply wasn't..."

Autoblog.com, January 9, 2010

1222



"...While Tucker might have only completed 51 cars, he obviously planned to make more. As such, some unfinished cars must have existed. Here's one. Meet the Tucker Torpedo Convertible, the only droptop Tucker in existence. One of one, so to speak. Built off the 'special box-wrapped oval frame stamped No. 57,' this frame was built by the Tucker Experimental Department and was, in fact, destined to be a convertible before fate stepped in. Then, over the intervening sixty or so years, someone (Benchmark Classics) stepped up and finished the job. It's outstanding looking..." 1223

Autoblog.com, January 9, 2010



"...And it's up for grabs. Well, the rear-mounted, helicopter-engined Tucker Convertible will be auctioned off during Russo and Steele's 10th anniversary event taking place January 20-24 in Scottsdale, Arizona. The No. 52 car has only two miles on the odometer and has never been titled. Should you buy it, you become its first owner. The convertible is painted Waltz Blue, a color derived from one of Mrs. Tucker's dresses. The top is tan. Best of all (for collectors), this car has been certified as authentic by none other than Al Pruett. Once again, we so wish we were filthy stinking rich." 1224

Autoblog.com, January 9, 2010



"...Allow us to clarify: the Tucker Torpedo Convertible we wrote about recently should herewith be referred to as the purported Tucker Torpedo Convertible. The droptop claiming to be a Torpedo will be up for auction in Scottsdale soon, offered by Russo and Steele. A note from the Tucker Automotive Club of America, however, states that it knows of no such car ever having been made by the Tucker Corporation..."

1225

Autoblog.com, January 12, 2010

"...The club does not say that the convertible in question is definitely not a genuine Torpedo. The club's position is that it has never been able to successfully prove the provenance of said car, 'nor has the seller responded to (the club's) request seeking the engine serial number and data plate information.' Without a single piece of documentation to support the car among the library of papers detailing Tucker's rise and fall, about the only thing to say for it is: buyer beware."

Autoblog.com, January 12, 2010

1226

"...Our conclusion is that we have no conclusion...The preponderance of evidence that we have seen is that it was not a factory product. We invite somebody to prove to us otherwise. I am definitely not opposed to finding some new piece of history. I'd love that! I'd love for somebody to be able to prove something. The problem with this car is that the proof is always conjecture...They were struggling to just get their feet on the ground. At the time, their goal is, 'We have to get cars built, just prove to dealers and public we're real on this.' They were even building cars they didn't get finished...They only built 37 cars that they felt were 'finished.' To think they were trying to make a convertible doesn't make any sense..."

Jay Folis (2009), President of TACA and marketing director of the Gilmore Car Museum in Hickory Corners, MI

RE: Folis noted that, at the time the convertible project would have been "secretly" started, Preston Tucker deep in legal troubles and barely had the finances and manpower to keep his operation afloat

1227

"...We know for a fact that several bodies, body systems, chassis, sheet metal...it was all sold at auction. My guess is that Joe Lincke wound up with some of these parts, and over time thought, 'You know what? This would be a fun project. We have all the sheet metal we need. We can build the chassis right here in-house. We can build a Tucker convertible. Why not make a fun project out of it?' That's where I feel its birth came from. The story of it being this off-site project...I just have to laugh."

Jay Folis (2009), President of TACA and marketing director of the Gilmore Car Museum in Hickory Corners, MI

RE: Folis emphasizes the point that a large number of Tucker parts were available and bought at auction/s following the Tucker Corporation's demise

1228

"I don't get angry about it, but if indeed this was the case...there would be a paper trail of some sort. Somebody had a purchase order to get work done. Somebody has notes. Somebody has details of some sort. There never was, and there isn't today. I'll say this: I spoke with Tucker family members - some of them are past now - and all of them emphatically disputed the idea that there was ever a convertible, or ever a convertible in the works..."

Mark Leiberman (2009)

RE: Leiberman - a Detroit-area Tucker enthusiast and restorer who once discussed with Allen Reinert buying chassis No. 57 (instead, he wound up buying No. 43). He also helped Reinert with his early restoration efforts on the convertible and even supplied some of its parts.

1229



"It comes up about every five years. It's this big can of worms, it goes away, then it comes back again...If nothing else, if they're going to finish it and everybody sees it, it will sort of bring some sort of closure to it."

Joe Kahn, TACA VP

1230

"...I've had Tucker people here, you know. I've had Tucker club members here, I've often invited club members...I've said, 'C'mon and look at it.' I've spent over 20 years re-searching Tuckers, and you get people who haven't even owned a Tucker that think they know every damn thing about Tuckers...I tell them it's right there in the garage, crawl all over it. I don't know what to tell you. People will say what they want to say. What can I do about it?"

Allen Reinert (2009)

1231



"We definitely don't want to play the silence game with this whole thing and not address the issue. We want to take the people who claim it's not a real car head-on...We're willing to have a meeting here at our shop with anybody who disputes it."

Justin Cole

1232



1233

A Never Ending Story

1234



"The Tucker story has always had its share of drama, and whenever some new chapter unfolds - like Francis Ford Coppola's 1988 movie, or the discovery of a mysterious convertible in 2009 - a new generation of motorheads is enchanted. The latest story begins in October 2010, with a car dragged out of a ramshackle garage in Auburn, Wash., where it was parked for 54 years. Complete but not running, the unrestored Tucker No. 1010 sold at Gooding & Co.'s Scottsdale, Ariz., auction Jan. 22 for \$797,500..."

Chicago Tribune.com, Feb. 1, 2011

1235

"...With the last two Tuckers selling for over \$1 million, the buyer of this car can still restore it and recoup most of his expenses," said Jay Follis, president of the Tucker Automobile Club of America. 'Most Tucker restorations today are in the \$250,000-\$350,000 range. With this car, I estimate much closer to the \$400,000 range to make it museum quality.' The turquoise sedan is the 10th of 50 pilot cars built by Preston Tucker in 1948 as he battled to launch a company that many thought would have changed the U.S. auto industry..."

Chicago Tribune.com, February 1, 2011

1236



1237

"...Tucker No. 1010 was bought on July 16, 1948, by Philadelphia Tucker Sales. On Nov. 22, it was returned to the factory (typically for upgrades such as the Y-1 transmission) and later sold to the El Monte Tucker Co. in El Monte, Calif. Fast forward to June 15, 1956, when a classified ad in the Oakland Tribune offered 'One of the fabulous originals - Tucker engine - it runs - 4-door sedan - near new condition. Make offer. Olympic 8-4238. By Owner.' Don and Mignonette Wright bought the car four days later and would own it for more than 50 years. By the time the Wrights bought No. 1010, it had been repainted in non-factory turquoise (over the original blue) and reupholstered, said Follis. Don Wright was president of the Tucker Automobile Club in 1980-81, but the family remained secretive about the car and wouldn't sell it..."

Chicagotribune.com, February 1, 2011

1238



1239

"...Though No. 1010's odometer shows only 9,819 miles, it is not the lowest-mileage Tucker...No. 1047 shows less than 50 miles and No. 1050, which wasn't fully completed on the assembly line, indicates only 2/10ths of a mile. Don Wright reported in the 1980s that No. 1010 had covered 109,819 miles while other sources have suggested it might even be 209,819..."

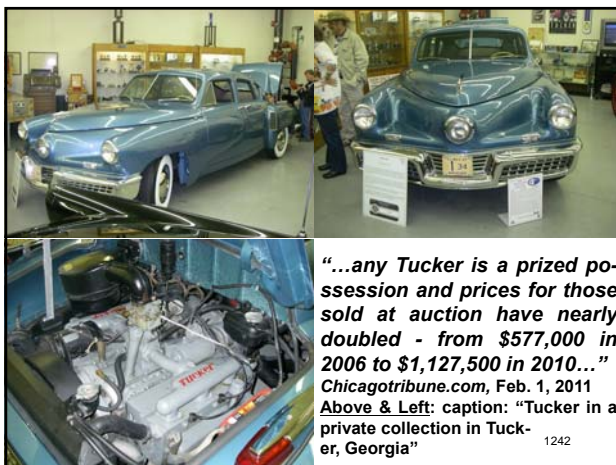
Chicagotribune.com, February 1, 2011

RE: with at least nine confirmed owners prior to June 1956, it's highly unlikely the car would have only 9,819 original miles, yet be in need of new paint and upholstery after only eight years. Also, low-number cars (like 1010) received a large amount of testing at the Chicago factory and were used for promotional purposes by Tucker dealerships.

1240



1241



"...any Tucker is a prized possession and prices for those sold at auction have nearly doubled - from \$577,000 in 2006 to \$1,127,500 in 2010..."

Chicagotribune.com, Feb. 1, 2011

Above & Left: caption: "Tucker in a private collection in Tucker, Georgia"

1242

Barrett-Jackson
THE WORLD'S GREATEST COLLECTOR CAR AUCTIONS®

Lot No. 5008
1948 TUCKER TORPEDO

Auction	Scottsdale 2012
Status	Sold
Price	\$2,915,000.00
Lot	5008
Year	1948
Make	TUCKER
Model	TORPEDO

Details

VIN	33550
Exterior Color	BLUE
Interior Color	GREY
Cylinders	6
Transmission	4-SPEED MANUAL

RE: 2012 Barrett-Jackson auction. The winning bid came in at \$2,650,000. Thus, the new owner paid a total of \$2,915,000 to drive their new Tucker home.



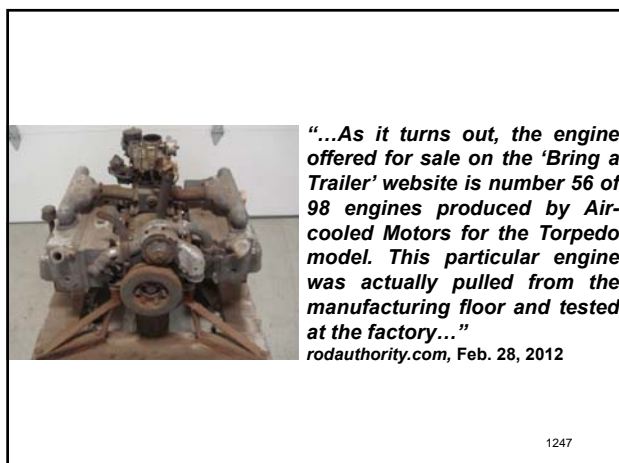
1243



"The Tucker Torpedo is rarer than rare when it comes to automotive makes and models. Not only were there just 51 of them ever built, the Tucker motor company also went under after producing the cars, giving owners of these unique vehicles one rare piece of automotive history. With this kind of background, Torpedoes, along with their parts don't exchange hands very often and when they do, they go for a pretty penny. Just back in January, a Tucker Torpedo actually sold at the Barrett-Jackson Scottsdale Auction for \$2.91 million. So when we heard about a Torpedo engine for sale via Bangshift, we had to check it out..."

rodauthority.com, February 28, 2012

1246



"...Unfortunately the engine was never shipped to the Tucker factory or mounted in a Torpedo because of the company's demise. It sat in a crate at Aircooled Motors until the Tucker assets were liquidated, at which time an employee at Aircooled bought the engine and stored it for over 50 years in a garage. According to the seller, it was a running engine back in 1950 when it was put in storage..."

rodauthority.com, February 28, 2012

1248

"...Just like its counterparts, the engine is a modified 335 cubic-inch flat-6 helicopter engine capable of 166 hp and 372 lb-ft of torque...Of the 98 engines made for the model, many were used for spare parts or replacements for burnt out engines, while others were scrapped when the Tucker corporation went under. This makes the engine up for sale extremely rare..."

rodauthority.com, February 28, 2012

1249



"...Currently the seller is asking \$60,000 for the 33556 serial-numbered engine. While this may sound a bit steep, you've got to remember the rarity of the car and the price that comes with it. We just hope the engine goes to good use and is reunited with a Tucker Torpedo if it sells."

rodauthority.com, Feb. 28, 2012

1250

Part 10

Tucker Redux

1251

Replicars

1252



Four replicas were made for the 1988 Francis Ford Coppola movie *Tucker: A Man and his Dream*. The four "replicars" were built by Mike Fennel Enterprises of Los Angeles, CA. Three of the movie car replicas were built in fiberglass. The fourth replica was a rebuilt Studebaker that was used in the roll-over scene.

Above: illustration Thom Taylor made for the movie (ca. 1985).
Taylor combined several of elements from original design drawings

1253



Above & Left: one of four fiberglass replica Tuckers built for use in the Tucker movie. This movie Tucker was built for the scene whereby car No. 1027 rolls over at the Indianapolis Motor Speedway while participating in a 24-hour endurance test.

1254



For the roll-over scene, a total of three cars were used; a fiberglass pre-crash version with no body damage (above), a modified *Studebaker* (which was actually driven and rolled by a stunt driver) and a post-crash version (which replicated the damage of car No. 1027). The fiberglass body was fitted onto a Ford LTD chassis.

1255



Tucker No. 1027 was not scrapped after the October 18, 1948 Indy roll-over (left). Instead, it was returned to the *Engineering Department* of the Chicago factory where the engine was removed. On the March 3, 1949, factory inventory, it was listed as: "no engine, wrecked." On October 18, 1950, the car was sold at the court-ordered bankruptcy auction as a lot described as "Cars & Parts, Assorted" for \$950. The buyer was an Illinois car dealer who would eventually become a source for several Tucker cars and parts. In 1951, a letter advertising the dealer's Tucker inventory lists: "Tucker No. 1027 - wrecked, \$1,500" among his offerings, which also included complete, running cars for \$5K. While it is unclear what happened to the body and chassis of Tucker No. 1027 (in which the front clip remained in remarkable condition), its engine, seats and rear bumper were used in the restoration of other Tuckers. Today, the smashed front doors are part of a private collection (right).

1256



Left: caption: "Fiberglass Tucker replica mounted on Ford chassis at the Ypsilanti Automotive Heritage Museum." This replica was one of four made for the Tucker movie. *Preston Tucker* was from Ypsilanti (his family owned *Ypsilanti Machine and Tool Company*) and initial design and development of the *Tucker Torpedo* was completed in Ypsilanti. The museum has an impressive display including Tucker promotional items, styling and engineering drawings as well as ephemera such as advertisements and newspaper clippings as well as the Tucker replica.

1257



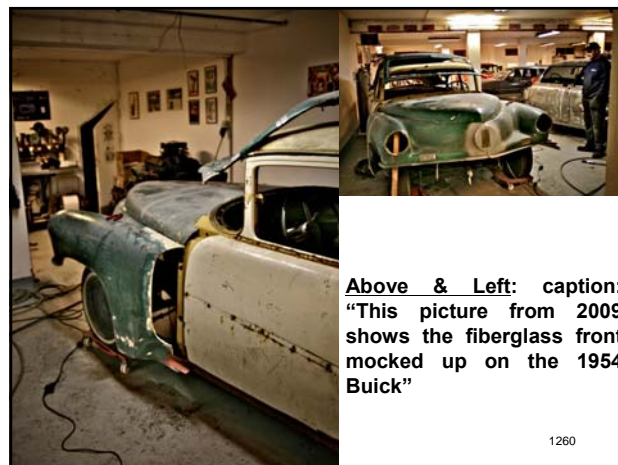
1258



One of the *Tucker 48* movie Replicas is owned by *Sondre Kvipt* of Oslo, Norway. Kvipt bought the car on eBay with plans to convert it into a shortened, two-door custom coupe. *Kjetil Kvipt* served as the master fabricator of the custom build. The car will be built using a 1954 *Buick Special* as the base car.

Above: caption: "An illustration made by *Zombie* showing the completed version of the car"

1259



Above & Left: caption: "This picture from 2009 shows the fiberglass front mocked up on the 1954 Buick"

1260



Above: George Esch built a fiberglass Tucker Convertible replica (completed in 1997). The car was based on a 1966 Chevrolet Corvair. He calls it the "Glass Goose."

1261



Above: this Tucker "replica" is attempting to reincarnate George Lawson's Tucker Torpedo design using a 1971 Buick Riviera. According to the seller on ebay, his uncle built the car as a labor of love and, supposedly, used actual plans from Tucker as his inspiration. Some of the replica's modifications include front fenders that turn with the wheels and a fin running down the back. All three headlights work, but the one in the middle is only for high beam. The hinged sections on the roof are meant to open to make getting in and/or out easy-on-the-skull. According to the eBay auction, the car was not in running condition and was in need of some restoration. A reserve of \$7,300 was set for the auction.

1262



1263



1264



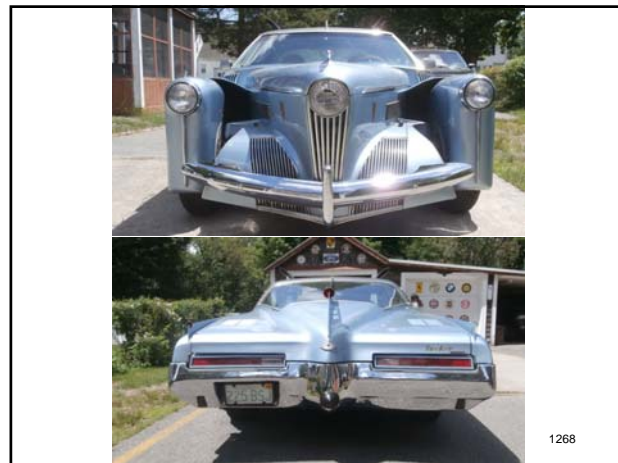
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1266



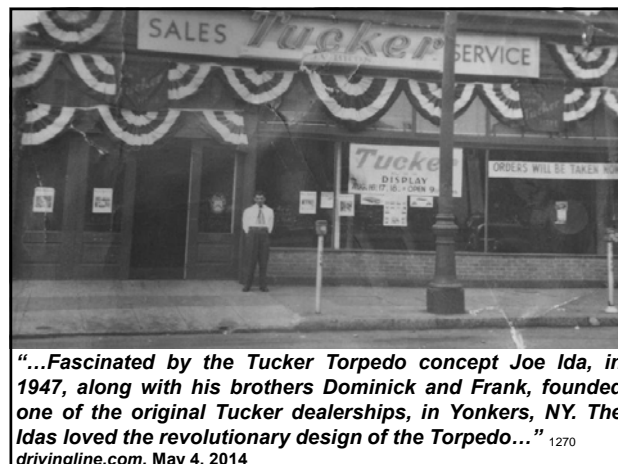
1267



1268

Something From Nothing

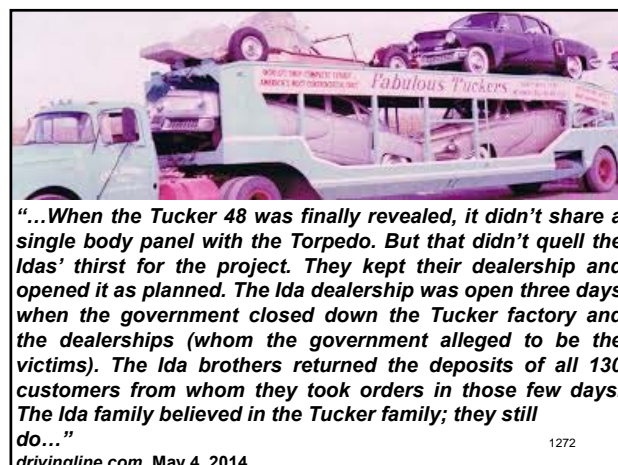
1269



"...Fascinated by the Tucker Torpedo concept Joe Ida, in 1947, along with his brothers Dominick and Frank, founded one of the original Tucker dealerships, in Yonkers, NY. The Idas loved the revolutionary design of the Torpedo..." 1270
drivingline.com, May 4, 2014

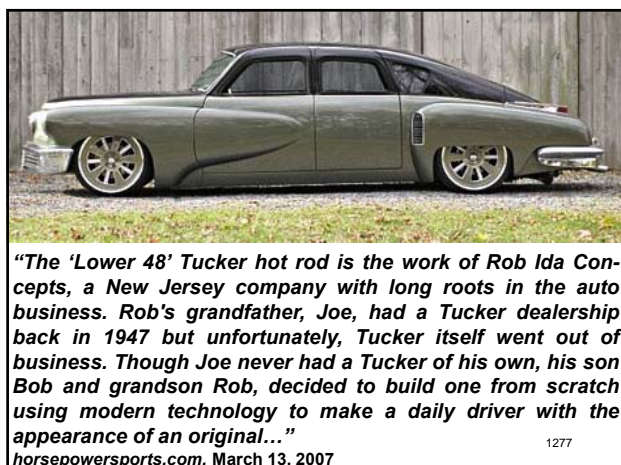
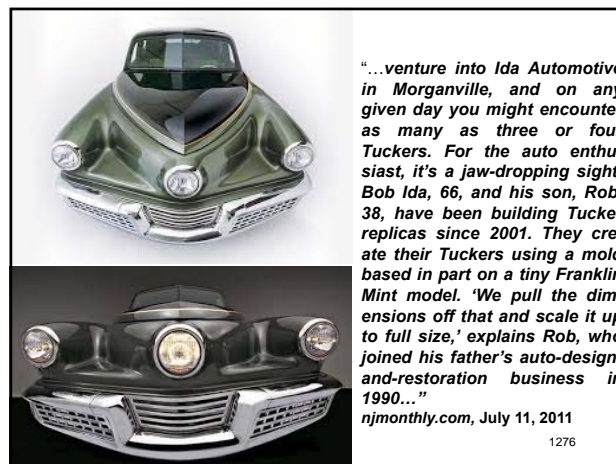
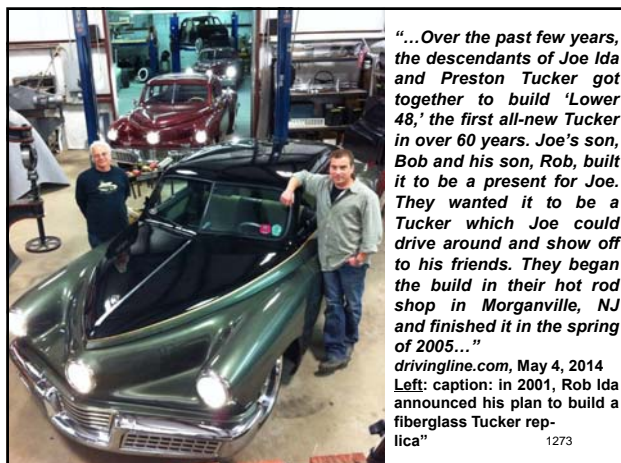
"...Bob Ida recalled the family's excitement as they awaited their allotment of Tuckers. 'It was such a dramatic thing...being in the empty showroom.' Once the cars arrived, the excitement only increased. The showroom was only open for three days, but the dealership took 130 orders for the Tucker sedan, which sold for about the same price as a Cadillac. 'We drove the Rockefellers for a demo,' Bob remembers'..."
njmonthly.com, July 11, 2011

1271



"...When the Tucker 48 was finally revealed, it didn't share a single body panel with the Torpedo. But that didn't quell the Idas' thirst for the project. They kept their dealership and opened it as planned. The Ida dealership was open three days when the government closed down the Tucker factory and the dealerships (whom the government alleged to be the victims). The Ida brothers returned the deposits of all 130 customers from whom they took orders in those few days. The Ida family believed in the Tucker family; they still do..."
drivingline.com, May 4, 2014

1272





1279



"...The Tucker - billed in 1948 as the 'Car of Tomorrow' - looked like nothing that came before it. In an era of bulbous, hump-backed behemoths, the Tucker had sleek, aircraft-inspired lines..."

1280

njmonthly.com, July 11, 2011



"...The body is a composite recreation using blueprints borrowed from John Tucker, Jr. and measurements from an original. Underneath, it's all tube frame and technology with a transverse mounted Cadillac NorthStar 4.6L V8 running twin Garrett turbos with 4 pounds of boost resulting in 392 hp. The engine is in the rear, just like the original..."

1281

horsepowersports.com, March 13, 2007



1282



"...To create the Tucker replicas, body panels are molded from resin-infused composite - a kind of plastic. Bumpers are hammered out of sheet metal, and mechanical parts are fabricated right in the shop. Modern Cadillac engines and transmissions are used - hardly an issue for purists, since Tucker used borrowed drive trains for his cars..."

njmonthly.com, July 11, 2011

Left T&B: caption: "Bob Ida with a Tucker rear grill fabricated in the Morganville shop. It will be fitted to their next Tucker (below), which is partially complete."

1283



1284



1285



"...Tucker was not just out to make a stylish car; he also put an emphasis on safety - something most manufacturers of the day ignored. 'In every direction - safety, performance, design - he was ahead of every other manufacturer,' says Rob. Tucker's proposed safety innovations included tubeless tires, disc brakes, independent suspension, a pop-out windshield and a steerable third headlight. Front-seat passengers were protected by a padded dashboard crowning a large hollow space - what Tucker called a safety chamber. All knobs and levers were recessed to further protect passengers. Tucker also wanted to equip his cars with seat belts, but his investors nixed the idea. Seat belts, they said, would imply that the car was unsafe. American consumers would have to wait 20 years for seat belts to become mandatory in all cars..."

1286

njmonthly.com, July 11, 2011



"...Although they've produced three so far, an original for Joe's grandfather, a second now in a Japanese museum and this one, they are not planning on running a production line. These are individually hand built machines of extremely high quality, something like a one year build time and Rob Ida Concepts has a lot of irons in the fire so if you want one, even if they agree, you may have to wait a very long time."

horsepowersports.com, March 13, 2007

1287



1288

VEHICLE TYPE: rear-engine, rear-wheel-drive, 6-passenger, 4-door sedan

ESTIMATED BASE PRICE: \$150,000

ENGINE TYPE: DOHC 32-valve V-8, aluminum block and heads, GM engine-control system with port fuel injection

Displacement: 279 cu in, 4565cc

Power (SAE net): 300 bhp @ 6000 rpm

Torque (SAE net): 295 lb-ft @ 4400 rpm

TRANSMISSION: 4-speed automatic with lockup torque converter

DIMENSIONS:

Wheelbase: 130.0 in Length: 220.0 in Width: 80.0 in Height: 58.0 in

Curb weight: 4080 lb

C/D-ESTIMATED PERFORMANCE:

Zero to 60 mph: 7.0 sec

Zero to 100 mph: 29.4 sec

Standing 1/4-mile: 15.8 sec @ 90 mph

PROJECTED FUEL ECONOMY:

EPA city driving 16 mpg

EPA highway driving 25 mpg



1289



1290



"Some rodders feel they need to make nothing from something by deleting every piece of trim and hardware and making an existing car so smooth that there is nothing to look at. We took the opposite approach and made something from nothing."

Rob Ida

1291



1292



"... 'We take an artistic approach to handcrafting a car,' says Rob. 'We create a rolling sculpture. It can go down the highway and be safe and reliable.' Their work gets an enthusiastic thumbs up from John Tucker, the grandson of Preston. He recalls seeing Rob and Bob's first replica. 'I just couldn't believe how close it was to the original,' Tucker says. 'I'm behind them 100 percent.'"

njmonthly.com, July 11, 2011
Left: Rob Ida

1293



1294

Back to the Future

1295

"...Never ones to shrink from a challenge, Bob and Rob set out several years ago to build the first - and only - Tucker Torpedo..."

njmonthly.com, July 11, 2011

1296



"...Although no Torpedo was ever built...there was a 1:4 scale model of the concept created by George Lawson, the original engineer on the Tucker project. The model was stored in a barn on the Lawson farm for decades before being donated to the Petersen Museum by Lawson's estate. If not for this one little model, the Tucker Torpedo, like so many other concept cars, would be completely lost to history..."

drivingline.com, May 4, 2014

1297

"...Just like Lower 48, the Torpedo is being made with the Tucker family. Sean Tucker, an automotive engineer by trade, journeys to the Ida shop weekly to assist Rob in the build. His brother Mike and father, John Tucker Jr., who is a grandson of Preston Tucker, also continue to help with the build, which is expected to be finished late in 2015. But how did this project come about?..."

drivingline.com, May 4, 2014

1298

"...Obviously, the Ida family and Tucker family adore these cars and certainly have the skills to build wonderful machines. But when a New Jersey car collector approached them with the idea of building him a Torpedo, the Idas began to wonder if it was possible. Knowing that there had never been a full-scale prototype, Bob Ida decided that the only way to make the first Tucker Torpedo was to go to Los Angeles and get his hands on the model and use it to design a full scale version using Computer Aided Design (CAD)..."

drivingline.com, May 4, 2014

1299

"...Using a three-dimensional digital scan of a recently re-discovered original scale model, they created a wooden 'buck' for the car - a sort of skeleton that will serve as a mold for their dream car. 'It's a life-size puzzle of a car that never existed,' says Rob..."

njmonthly.com, July 11, 2011

1300



"...Back in New Jersey, Bob got to work designing the 2015 Tucker Torpedo. Once he finished designing it, son Rob built a buck on which to build the bodywork of the car; the Ida shop will also build the frame and drivetrain separately..."

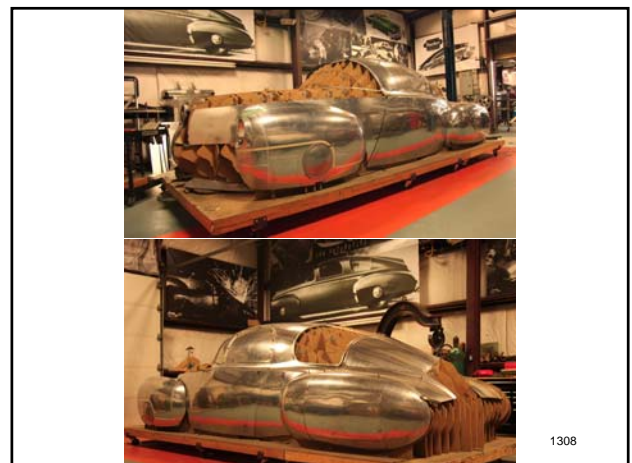
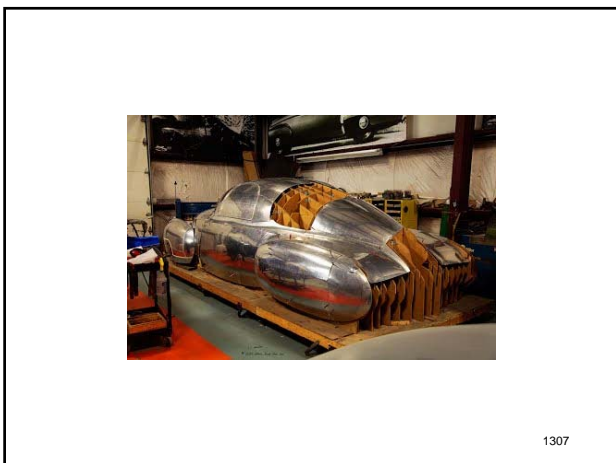
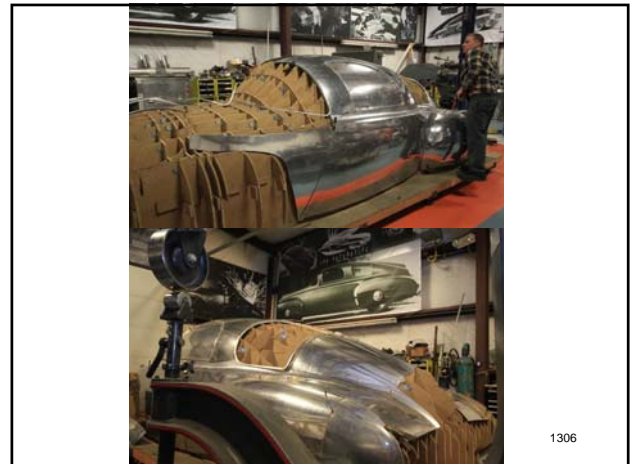
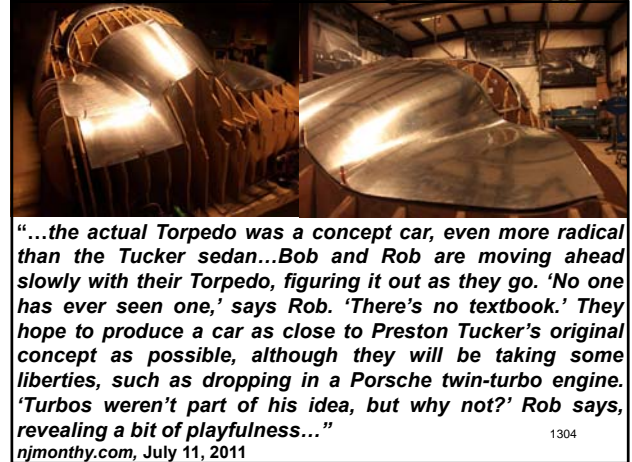
drivingline.com, May 4, 2014

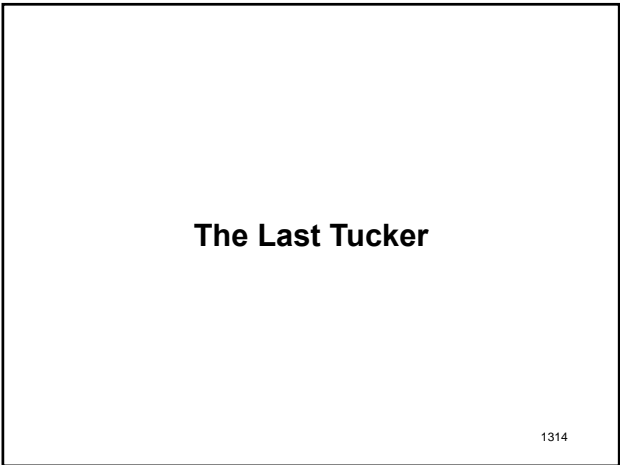
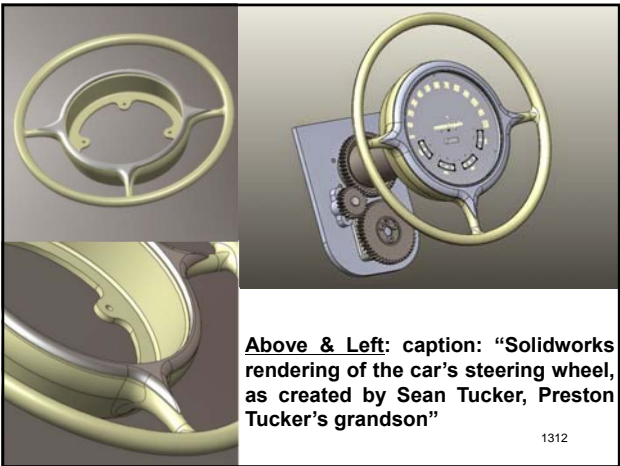
Above L&R: in 2009, Rob Ida Concepts constructed a wooden buck he could use to hand build George Lawson's Tucker Torpedo out of aluminum. A model Lawson made of the car was scanned and the dimensions were converted to full-scale before the shapes were CAD drawn and CNC cut. Fabrication of the body panels began in September 2013.

1301



1302





"When Preston Tucker's automobile factory closed, it left behind the makings of more than a dozen additional vehicles, some of them rather easy to assemble, some a little more difficult. Now, more than 65 years later, one of the latter has made its public debut and become quite possibly the last Tucker to ever be built..."

blog.hemmings.com, July 28, 2015

RE: when the inventory of the Tucker Corporation was counted car-by-car and piece-by-piece under court order on March 3, 1949, the company listed thirty-eight drivable cars, an additional thirteen more cars that awaited final assembly

1315

"...For the last quarter century, the total number of Tucker 48s built (not including the Tin Goose prototype) has stood at 51: 37 built and sold from the factory in Chicago, 13 completed after Tucker shut its doors, and one built from parts decades later. Yet Tucker enthusiasts have long known of a collection of parts floating around the collector car community that could, feasibly, come together to build one more Tucker. Those parts just needed somebody intrepid enough to put them all together..."

blog.hemmings.com, July 28, 2015

RE: truckloads of parts including two test chassis and new interior and body and mechanical parts were inventoried (intended to be used in construction of new cars that were never made manifest). In fact, there were parts, such as a chassis and firewall, stamped with the serial number "1052."

1316

"...A number of collectors tried, according to Jay Folis, former president of the Tucker Automobile Club of America. Ezra Schlipf, who bought much of the contents of the Tucker factory at its bankruptcy auction in 1950, sold most of the parts necessary to build a whole car – the cowl, dash, seats, and chassis of car No. 1052; the front sheetmetal from car No. 1018; NOS bumpers, front doors, quarter panels and decklid; and an engine and transmission – to Stan Gilliland, one of the co-founders of the Tucker club. Gilliland never assembled the parts into a whole, though, and ended up selling the lot to Dick Kughn, who in turn sold it to Wayne Lensing, who had planned to use the parts to create an exhibit replicating the Tucker assembly line..."

blog.hemmings.com, July 28, 2015


RE: a large group of Tucker surplus parts circulated among well-known hobbyists for decades, including Tucker Automobile Club of America co-founder Stan Gilliland

1317

"...Meanwhile, Tucker enthusiast John Schuler of Aurora, Indiana, had begun his own search for a Tucker to purchase or restore. 'When I started, there was this period where nobody was selling Tuckers,' he said. 'And then when they did start selling them, the prices kept going up.' He did manage to buy a Tucker six-cylinder air-cooled engine, but he kept missing out on private sales or getting outbid on Tuckers at auction. Schuler knew of Lensing's parts collection, but plenty of other Tucker enthusiasts before him had tried and failed to convince Lensing to sell the parts. 'I think my timing was just right,' Schuler said. 'Wayne's dream was getting a little harder to fulfill, so he decided to sell'..."

blog.hemmings.com, July 28, 2015

1318



**America welcomes
a Completely New Car**

Tucker

COMPLETELY NEW—
TO THE FUTURE—
COMPLETELY PROVED

"I have been fascinated with buying a Tucker since I was a kid. I saw their ads in the newspaper and they were neat. I wish I had gotten involved in the Tucker earlier. I would have had a car years ago."

John Schuler

1319

"...So in the spring of 2010, Schuler sent the parts to Tucker expert Martyn Donaldson to have him take inventory of the haul. According to Tucker historians, factory engineers used chassis No. 1052 as the testbed for the automatic transmission Preston Tucker initially envisioned for the car; the engineers were actually able to get it running and driving around the factory with a dashboard and seats bolted to the chassis. Tucker No. 1018 had been wrecked in 1948, but its front sheetmetal remained undamaged. Schuler couldn't likely source another automatic transmission – only one complete automatic transmission car had been built – so he had Gilliland rebuild a Tucker Y-1 transmission for the car..."

blog.hemmings.com, July 28, 2015

1320



"It was pretty much in pieces, it was a basket case"

John Schuler

Above: caption: "Never-used and used 1948 Tucker parts are being assembled to the cowl of what was to be Tucker 1052, thus creating a new Tucker with almost all Preston parts." Schuler charged *Classic & Exotic Service, Inc.* of Troy, MI., with the rebuild of his Tucker.

1321

"I think it's pretty great that somebody is taking the effort to assemble this car 65 years after the fact"

Jay Follis, former president of TACA and director of the *Tucker Historical Collection and Library* at the *Gilmore Car Museum* (in Hickory Corners, MI)

1322

"...The only major parts the haul didn't include were rear doors, a roof, and a floor. Donaldson then sent the partially assembled car on to Brian Joseph at Classic and Exotic Service in Troy, Michigan, where Joseph not only fabricated a floor and roof, but also a pair of rear doors, using patterns from other Tuckers the shop has worked on. 'I didn't realize when I started what a big job it was,' Schuler said..."

blog.hemmings.com, July 28, 2015

RE: the foundation for the car was test chassis No. 3, which was shown in Tucker film footage driving around the plant with passengers on its two bench seats behind a cowl. This chassis was used to test an automatic transmission (a Tucker manual Y-1 transmission was used in the rebuild). The front clip for Schuler's Tucker came from Tucker No. 1018, which was wrecked in Pennsylvania during the 1950s, and the engine is a used unit from another Tucker that received a new powerplant unit during its restoration. The vast majority of the remaining parts are never-used parts from the *Tucker Corp.* parts bin: hood, front doors, quarter panels, engine cover, bumpers, speedometer, etc.

1323

The 18th (serial No. 1018) production Tucker was sold to its New York-area distributor; *Buffalo Tucker Sales*, on July 30, 1948. *George McKinney*, of Bradford, PA, owned both the Buffalo distributorship and the dealership in Titusville, PA and would later become chairman of the *Tucker Distributors and Dealers Committee*. In September and October 1948, local newspapers reported McKinney driving the Tucker to "various towns, giving demo rides and showing the car to friends." One paper even reported that several people driving their cars past the Tucker turned around "and hurried back to give the car a look-over."

1324



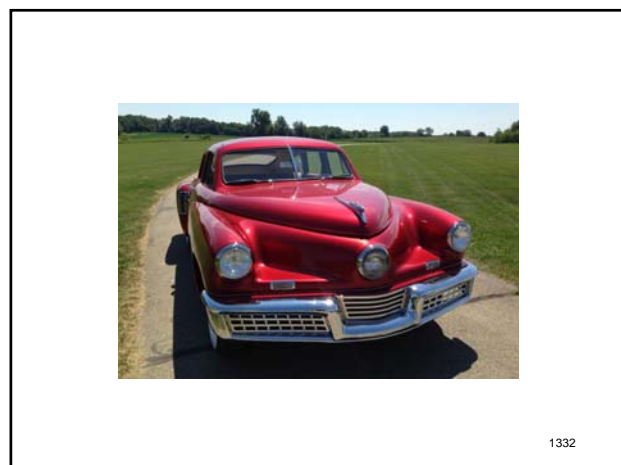
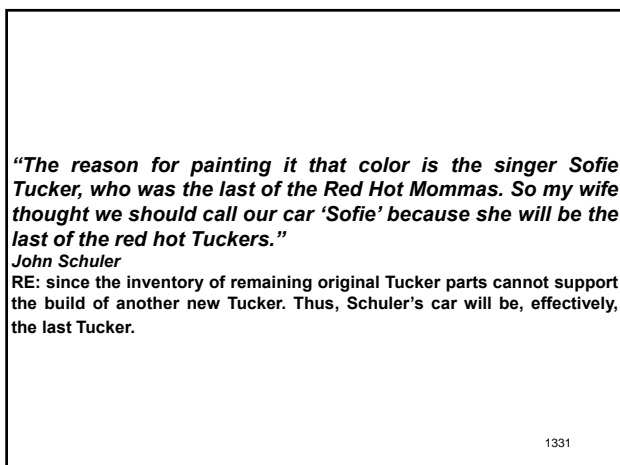
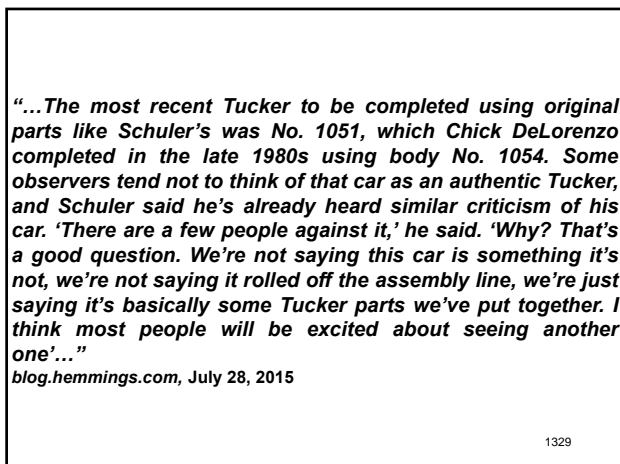
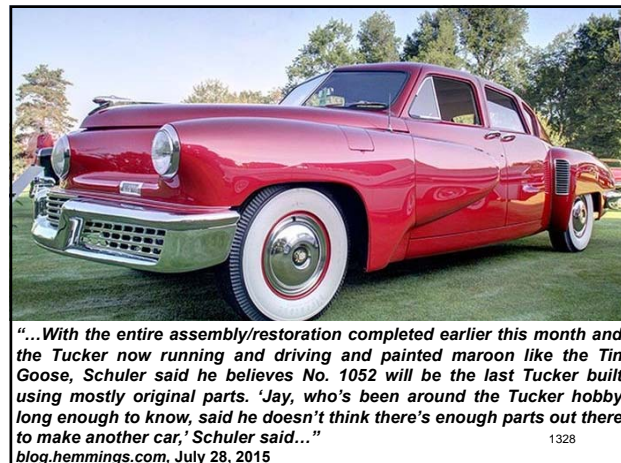
It was sometime after these news reports were published that Tucker No. 1018 was involved in a crash, apparently hitting a tree broadside near South Wales, NY, which left it damaged beyond repair (left). No injuries were reported and the salvaged remains, which included the entire front clip of the car, were returned to Bradford, PA. In 1992, the engine, radiator, fender vents, and under-seat heater from Tucker No. 1018 were purchased by a collector, while the front clip was located by another collector and was later sold (in 2002) at an auction held in Novi, MI.

1325

"I believe the most difficult part of the restoration was making the rear doors and the sheet metal for the roof. Brian Joseph made that and has done a good job on it. He had Gilmore Car Museum's Tucker at his shop and they used templates and patterns off of it to build these parts."

John Schuler

1326



“...Tucker No. 1052 debuted this past weekend at the Concours d'Elegance of America in St. John's, Michigan (where it won its class), and will make a followup appearance at the Red Barns Spectacular at the Gilmore Car Museum in Hickory Corners, Michigan...”
blog.hemmings.com, July 28, 2015

1333



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What If...

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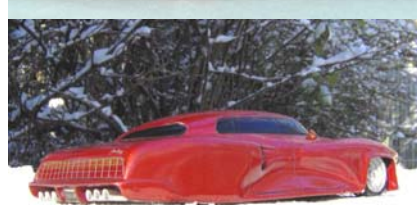
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1346

Cyberspace Tucker

1347



Above: caption: "The Walker Rocket is a large four-door sedan that has an extremely powerful engine. With a bold and unique design straight out of a science fiction movie, the Rocket is sure to turn heads as you drive down the streets of Empire Bay."

RE: the Walker Rocket is a vehicle in *Mafia II* that bears an uncanny resemblance to the Tucker 48 (minus the cyclops headlight)

1348



1349



1350



1351

What Might Have Been

1352

"The state of Illinois likely didn't issue too many manufacturer license plates in 1948, so it's no surprise that the first of those plates went to the biggest auto manufacturing story in that state at that time. More than 60 years later, those plates, recently unearthed from a decades-long rest, will head to auction along with a couple other unique pieces of Tucker memorabilia..."

blog.hemmings.com, July 30, 2012

1353



"...According to Bonhams, which will include the license plates and two renderings of a Tucker sports car in its Quail Lodge sale next month, the memorabilia comes from the estate of the unnamed assistant treasurer of the Tucker Corporation, headquartered in a sprawling Chicago factory that built engines for B-29 bombers during World War II. The license plates – reportedly used on the first Tucker production car – show a little storage rash, but the renderings remain amazingly crisp..."

1354

blog.hemmings.com, July 30, 2012

"...Bonhams attributed the renderings to Read Viemeister, a designer with Lippincott & Margulies Design, which Preston Tucker hired as a design consultant while still in the development stages for his eponymous car, and which sent Viemeister and four other designers to Chicago to work alongside Alex Tremulis, who ended up designing the majority of the car...Bonhams has placed a pre-auction estimate of \$6,000 to \$8,000 on the pair of license plates and \$4,000 to \$6,000 on each of the renderings."

blog.hemmings.com, July 30, 2012

1355



1356

Part 11

Gone But Not Forgotten

1357

The Collectors

1358



"I thought that buying Model T's was kind of normal, so I decided to go after low-production cars like the Tucker, of which only 51 were produced..."

John R. Lemmo

RE: Lemmo, a car collector and former Director of Operations for the Cleveland Browns, bought the Tin Goose prototype - then just a rusted heap behind a Pennsylvania barn, in 1971. In 1973, he found Tucker No. 1020 wasting away in Elyria, Ohio and bought it too. He then set about the difficult and expensive task of restoring them, which took him about fifteen years.

1359



Above: caption: "Revolutionary New Auto is Previewed. Tucker Torpedo, nation's newest automobile, is shown in yard of Chicago plant. Going ahead with plans to begin production in September, despite current controversy with SEC over stock registration. The radically different medium priced car, designed not to turn over no matter how driven, is five feet high, has engine in rear, with clutch, transmission and differential eliminated; is reported to have 800 less parts than conventional cars."

1360

New Tucker Automobile On Display Here, Today

The new Tucker automobile was being shown today from 10 a. m. to 10 p. m. at Simmons Motor Company, Inc., 224 Commerce Place, William L. Simmons, owner, announced. It is advertised by its manufacturers as the first new car in 50 years.

Powered by a 168-horsepower engine in the rear, the Tucker has its luggage compartment under the hood and is equipped with many new safety devices. Simmons said the model to be shown is one of 50 pilots cars now being displayed throughout the country.

1361



Above: caption: "Large Crowds View Tucker Automobile During Display Here. The radically designed new Tucker automobile, with the motor in the rear, was displayed for the first time here Thursday at Simmons Motor Company, 224 Commerce Place. The car, now coming off the production line to supply dealers for demonstration purposes, is expected to be on the market by early Fall. The price hasn't been set, but W.L. Simmons, president of the Simmons Company, local agents, says it is to be in the medium price range. The center headlight, another innovation, turns automatically with the turns of the steering wheel to peer around curves in the road. Simmons estimated 10,000 people saw the car."

1362



"...I went crazy just trying to find parts is almost impossible. Most of them had to be remade. Besides, the prototype alone has got about 900 pounds of lead in it. After I got going on it, it became a kind of emotional thing. I wanted to see the cars complete."

John R. Lemmo

RE: at one time, Lemmo (who died in 2004) owned thirty-two classic cars and two airplanes (he had hoped to one day open a museum). During the restoration of the Tuckers, Lemmo sold other cars in his collection to help pay for the restoration of the two Tuckers. By the time he was done, including the two restored Tuckers, there were just five classic cars left in his collection. Lemmo used his basement as a showroom to display the restored Tuckers.

Left: caption: "John Lemmo stands with the Tin Goose, prototype for the Tucker automobile, in his basement showroom. The car is up on jacks because it is being restored." 1363

Right: caption: "The restored Tin Goose prototype in its original maroon color"



1364



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1367

The Lady With the Tucker

1368

"As a lover of wonderful old automobiles, Debbie Hull finds herself suspended in a strange and perplexing place. She owns a Tucker '48 sedan, which immediately puts her in a very small fraternity (and an even smaller sorority). And with such a position comes a whole laundry list of difficulties, dilemmas and opportunities..."

oldcarsweekly.com, February 18, 2011

1369

"...There are only 47 of those famous cars left in the world, of course, and Hull isn't certain, but she thinks she is the only woman who has sole ownership of one. And she loves her car. It reminds her of her late father, Mel Hull, who was a passionate car buff and collector. He originally bought the car way back in 1959 and owned it for more than three decades before he eventually handed the keys and title over to Debbie, one of his three daughters, in 1988. The car is her pride and joy. It has been in her family for as long as she can remember, and it's hard for her to even imagine not being 'the lady with the Tucker'..."

oldcarsweekly.com, February 18, 2011

1370



1371

"...But, as they say, every rose has a thorn. When you own such a car, you get to worry and obsess about things that other car owners don't. Where should you keep it? How much should you run it? How much do you insure it for? Should it be on public display, or on the road, doing what a car was supposed to do? And maybe the biggest question of all: It might be a family heirloom, but a Tucker is worth a lot of money and a lot of other people would like to own it - should I consider selling it?..."

oldcarsweekly.com, February 18, 2011

1372

"...Hull, a resident of Concord, Calif., wrestles with many of those questions every day. 'I don't think there are any others owned solely by a woman, so there is some notoriety there,' laughed Hull. 'It gives you some bragging rights. And I think, 'Gosh, if I sold it, then I wouldn't be a Tucker owner anymore!'..."

oldcarsweekly.com, February 18, 2011

1373

"...So far, Hull has held off on making any rash decisions and has instead put the car on display in the San Diego Auto Museum. There, the car gets regular care, Hull doesn't have to worry about storing it and keeping it secure, and the car is available for public enjoyment. 'It's probably going on seven years there, I think,' she said. 'It's nice not having to worry about it. Rust never sleeps!..."

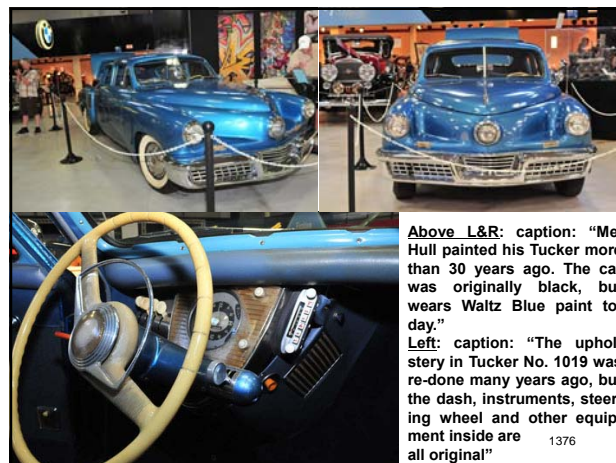
oldcarsweekly.com, February 18, 2011

1374

"...It's funny, every now and then a friend of mine wants to go see it...and I'll tell the museum to give them 'behind the rope' privileges. But I do miss it. It's not like it used to be. I had so much fun with the car. My sister and I drove it all over Northern California when the Tucker movie came out, and that car never let me down. When I go down to the museum, I hate to see it just sitting, but at least people get to see it, and the museum just loves it. And now, the worth of the car is kind of scary'..."

oldcarsweekly.com, February 18, 2011

1375



Above L&R: caption: "Mel Hull painted his Tucker more than 30 years ago. The car was originally black, but wears Waltz Blue paint today."

Left: caption: "The upholstery in Tucker No. 1019 was re-done many years ago, but the dash, instruments, steering wheel and other equipment inside are all original"

1376

"...Indeed, prices have soared in recent years when a Tucker changes hands. Twice the cars have topped the \$1 million mark at auction – Tucker No. 1038 went for \$1,017,500 in 2008 at the RM Monterey event, and two years later No. 1045 sold for \$1,127,500 at the same venue. Another car, No. 1041, brought \$750,000 at auction in 2009. Tucker No. 1010, a mostly original car with only about 10,000 miles, is scheduled to cross the block at Gooding & Company's 2011 Scottsdale Auction Jan. 22. It will no doubt draw plenty of interest and spirited bidding as well. 'A lot of Tucker owners are going to be real interested to see what the prices do in the next year or so,' Hull admitted..."

oldcarsweekly.com, February 18, 2011

1377

"...Making a killing on an auction was probably the furthest thing on Mel Hull's mind one day back in 1959, however. 'He was out driving and he went by a repair shop and saw the pipes sticking out of the back of the car in front of the shop,' Debbie recalled. 'He knew about Tuckers because he was a car guy. He knew right away what the car was. So he turned around and went into the shop and started asking about the car - the car was apparently having some transmission problems. Well, the car had belonged to a guy from Wallawallah, Wash., and Dad ended up giving the guy an airplane ticket home and \$1,250. I think Dad drove the car home in second gear, and that's where it all started...He was a car guy and as the years went by, he had a collection of maybe 30 different orphan cars...He sold a lot of them when his health started to fail, but we wouldn't let him sell the Tucker'..."

oldcarsweekly.com, February 18, 2011

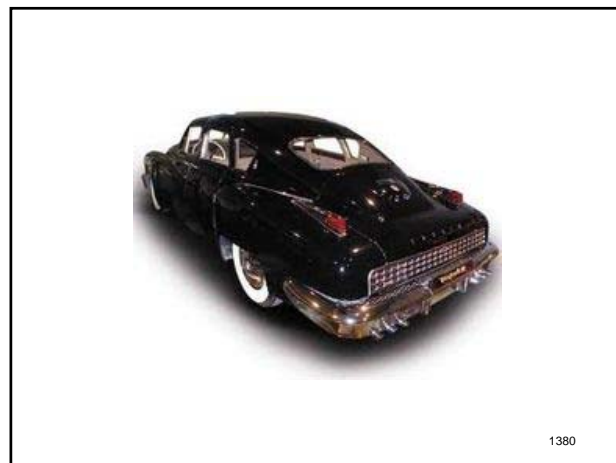
1378



"...Mel's car was Tucker No. 1019 - only the second Tucker originally painted black. The car eventually became the centerpiece of Hull's eclectic collection and was generally reserved for special occasions and joyrides near the family's Pasadena home. 'Like Easter,' Debbie noted. 'He always took us out for a ride on Easter. For the longest period, he was so busy that he didn't get it out much. Then when he retired, he was able to take it to Apple Valley and put it in parades and things. Then his health started to fail and he didn't get to drive it much'..."

oldcarsweekly.com, February 18, 2011

1379



1380

"...Sometime around 1980, Debbie figures, Mel painted the car himself, giving it its current coat of Waltz Blue. He also had the interior upholstery re-done. 'He did paint it once - outside at night,' Debbie said. 'And he did the interior, but the car was never taken down to a frame-off restoration. It's one of the few Tuckers that haven't been restored like that, and that, I suspect, has some value. The nuts and bolts on it are all from the factory'..."

oldcarsweekly.com, February 18, 2011

1381

"...Then, in 1987, the Hulls' Tucker got to take a star turn when it joined a couple dozen other '48 sedans in the filming of 'Tucker: The Man and His Dream.' The car made it into several scenes in the movie, with Mel driving and Debbie riding shotgun..."

oldcarsweekly.com, February 18, 2011

1382



"... 'They used a bunch of the cars in the scene of them driving around the courthouse, and then the scene when they did the parade in Oakland down Grand Street... They used the Opera House over in San Francisco. In the movie, in the car where you can see two people - that's us..."

oldcarsweekly.com, February 18, 2011

1383



"... 'They made those 26 cars look like 50. They had some mocked-up Studebakers, and also had cardboard cutouts they'd put at the end of the line of cars. It was a very fun experience..."

oldcarsweekly.com, February 18, 2011

Above: the 1950 stunt Studebaker (after rollover)

Left T&B: still shots from the movie

1384



1385



1386

"...The movie also marked the only time in the past 42 years that No. 1019 almost changed hands. 'Well, before the movie, a lot of the Tucker owners were getting letters from Paramount Pictures asking if they were interested in selling their cars,' Hull said. 'I think they were offering between \$60,000 and \$80,000. Dad did get an offer, but that's when the family said, 'No, no, no, you can't do that!'..."

oldcarsweekly.com, February 18, 2011

1387

"...High times for the Hulls and their Tucker ensued after the movie debuted in 1988. 'Dad and I drove to the movie together, and right afterward is when he gave the car to me,' Debbie said. 'Then my sister and I had a blast going all over, to all the stores and premiers and everything. The car has about 109,000 miles on it - most of them have over 100,000 - and I probably put at least 5,000 on in those first couple of years. I loved to drive it'..."

oldcarsweekly.com, February 18, 2011

1388



"...And even when she wasn't driving it, Hull always had a topic of conversation she could pull out at anytime - even during tough times during work as a critical care nurse. 'If I was working on an older gentleman and wanted something to talk about, I could start by saying 'Do you know what a Tucker is?' I'd always get them talking about cars like that'..."

oldcarsweekly.com, Feb. 18, 2011

Left: caption: "There was no mistaking a Tucker radio. Its vertical buttons spelling out the car's name were a dead giveaway."

1389

"...After the hoopla of the movie, the dilemma was I just didn't have a climate-controlled area to keep the car in. I had a metal garage, basically. I wanted to be able to rest when it rained, you know? I just didn't want it sitting in there like that...It was a dilemma. I really don't have the money to refurbish and restore it to what it should be...but there are people out there that do, and that have the love for the car, too. The people that are restoring them now are restoring them to 100-point cars...There are just a handful of people that really have the ability to restore it and have the knowledge that is needed. There are a handful of people that could do it justice'..."

oldcarsweekly.com, February 18, 2011

1390



"...Hull giggles when she recalls a quote that Mel Hull occasionally spouted off. 'My dad used to tell me, 'If anybody ever offers you a million dollars for the car, you take it!' 'At the time, I'm sure he was saying that tongue-in-cheek,' Hull said. 'If I had \$100,000 or \$200,000 to restore it, things would be different. Until then, I'm going to keep it the way it is and wait and see what happens.'..."

oldcarsweekly.com, February 18, 2011

1391



1392

Everything Tucker

1393

"To own just one Tucker takes a certain amount of luck and determination. To own three – along with the world's most extensive collection of Tucker memorabilia, Tucker mechanical parts, and most of the Tucker engineering drawings – takes dedication, and nobody in the world showed more dedication to the marque than collector David Cammack, who died Sunday at the age of 85..."
blog.hemmings.com, April 10, 2013

1394



"...Cammack got his first glimpse of a Tucker in 1948 at the Mayflower Hotel in Washington, D.C. Cammack, then a teenager, had gone to see the prototype, known as the Tin Goose, and its massive 589-cu.in. flat-six engine, but lost interest in the car when the company failed. It wasn't until 1972 that Cammack, by then a successful real estate investor, bought his first Tucker, number 1022. The other two – numbers 1001 and 1026 – came in quick succession over the next couple of years, but almost more important than the cars were the ephemera that came with them or that Cammack later bought: one of two Tucker test chassis, a variety of prototype and production Tucker/Air-cooled Motors engines, and about 50,000 blueprints for just about every component that made up a Tucker..."
blog.hemmings.com, April 10, 2013

1395



"I don't think there was any doubt that Preston Tucker was serious about building a car. I think all these drawings provide that."
David Cammack

1396



"....after restoring all three cars, he never drove them. He did, however, lend two of them to the production of Francis Ford Coppola's film, 'Tucker: The Man and His Dream'..."
blog.hemmings.com, April 10, 2013

1397

"When David Cammack died in April at the age of 85, he left behind the most extensive collection of Tucker memorabilia on the planet, including three original Tucker automobiles. Thanks to his generosity, automotive enthusiasts will be able to view the Cammack Tucker collection at the AACA Museum in Hershey, Pennsylvania, when a new gallery opens next year..."

blog.hemmings.com, October 2, 2013

RE: Tucker aficionado and collector David Cammack had arranged to donate the entire collection to the AACA's (*Antique Automobile Club of America*) museum in Hershey, PA, where a 3,500-square-foot room was built specifically to exhibit the collection. The collection was moved from its longtime home in Alexandria, VA in enclosed trailers. The exhibit includes not only three Tucker cars (Nos. 1001, 1022 and 1026 - all painstakingly restored) but also several complete engines, test stands, suspension parts, Tucker Y-1 transmissions and many other replacement and restoration parts that Cammack had collected (as well as about 50K blueprints).

1398



"...In addition to its three Tucker automobiles (numbers 1001, 10-22 and 1026), the gallery will also feature Tucker test chassis No. 2, prototype engines, Tucker parts and thousands of engineering drawings..."

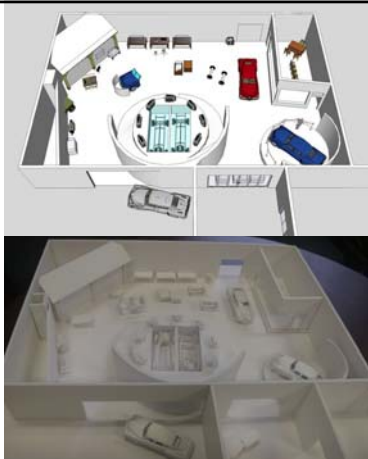
blog.hemmings.com, October 2, 2013
 Left: caption: "David Cammack with his collection"

1399

"Years in the works, the AACA Museum's planning on the new permanent home for David Cammack's Tucker collection kicked into high gear earlier this year when the collection made its way from Alexandria, Virginia, to Hershey, Pennsylvania, following Cammack's death. This week, the museum released their vision for the exhibit and announced a \$500,000 capital campaign to fund its construction..."

blog.hemmings.com, November 26, 2013

1400



1401

"...Cammack arranged for the donation of the collection to the museum, a natural continuance of the willingness to share the collection with other Tucker and automotive enthusiasts when he had it housed in a nondescript warehouse in Alexandria. 'I wouldn't want it if I had to keep it in a safety deposit box,' he said at one point. 'Who wants something like that? You can't enjoy it and nobody else can. That's not my nature'..."

blog.hemmings.com, November 26, 2013

1402

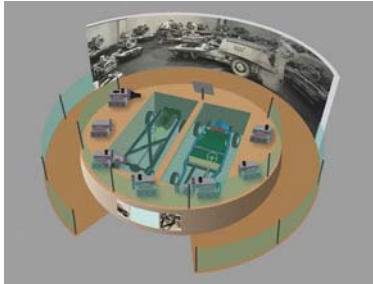


1403

"...While the 5,200-square-foot gallery that the collection will inhabit at the AACA Museum has hosted other exhibits over the years, it has been earmarked to serve as the permanent home of the Cammack collection since construction of the museum 10 years ago, according to Nancy Gates, the museum's director of marketing. Cammack's 50,000 blueprints and other printed materials will head to the AACA Library, though some will be scanned and included as digital files in the exhibit at the museum. Meanwhile, the exhibit will contain a raised platform with architectural glass in the floor to allow viewing of the Tucker test chassis, ringed by the various engines from the collection. The rest of the Jim Booth-de-signed exhibit will include a representation of a Tucker dealership, inter-active displays, and a replica of Preston Tucker's work desk...Cammack, who began collecting Tuckers in 1972, died this past April at the age of 85. The AACA Museum moved his collection to Hershey over the summer."

blog.hemmings.com, November 26, 2013

1404



1405

The Center of the Tucker Universe

1406

"Three generations of Tuckers gathered Wednesday evening in Hershey for the grand opening of what one described as 'the center of the Tucker universe,' the Cammack Tucker exhibit at the AACA Museum. 'There's nothing of this magnitude anywhere else,' said Sean Tucker, grandson of Tucker automobiles founder Preston Tucker. 'The cars in the museums across the country, their owners have put together good exhibits, but here, you've got the test chassis with the 589 – you'll never see that anywhere else'..."
 blog.hemmings.com, October 9, 2014

1407



1408



"...Credit that to David Cammack, the longtime Tucker collector who brought under one roof not only the test chassis for the Tucker 48, but also Tuckers numbers 1001, 1022 and 1026, about half a dozen prototype and production Tucker engines, and truckloads of memorabilia and materials..."

blog.hemmings.com, October 9, 2014

Left: caption: "Tucker family members gathered for the grand opening of the Cammack Tucker Gallery

Right: caption: "Tucker Test Chassis"

1409



1410

"...Dave picked the right cars, the right parts,' Sean said. 'This stuff was never even together when Preston was alive, but Dave went out and grabbed it'..."
blog.hemmings.com, October 9, 2014

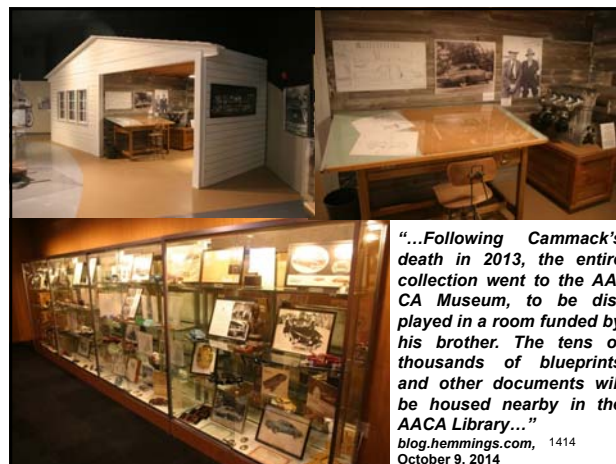
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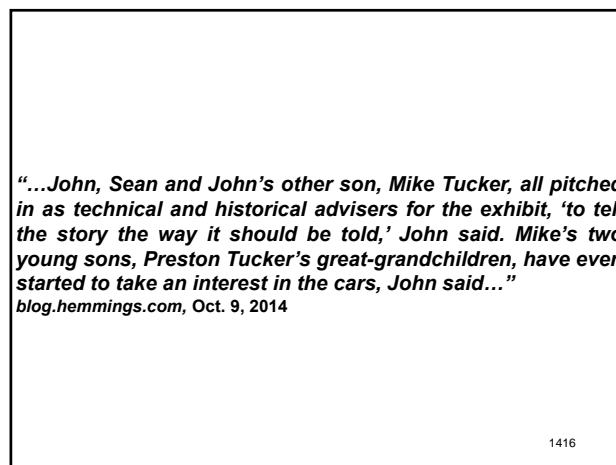
"...Following Cammack's death in 2013, the entire collection went to the AA-CA Museum, to be displayed in a room funded by his brother. The tens of thousands of blueprints and other documents will be housed nearby in the AACA Library..."
blog.hemmings.com, October 9, 2014

1414



"...This was Dave's dream,' said John Tucker, Preston Tucker's son and recently elected president of the Tucker Club of America. 'The first time we talked about it was in 1997 at that year's Tucker meet in Ypsilanti, Michigan. We'd discussed putting the collection in either Ypsilanti or Hershey, and decided Ypsilanti wasn't quite big enough for the whole collection'..."
blog.hemmings.com, October 9, 2014

1415



"...John, Sean and John's other son, Mike Tucker, all pitched in as technical and historical advisers for the exhibit, 'to tell the story the way it should be told,' John said. Mike's two young sons, Preston Tucker's great-grandchildren, have even started to take an interest in the cars, John said..."
blog.hemmings.com, Oct. 9, 2014

1416



1417

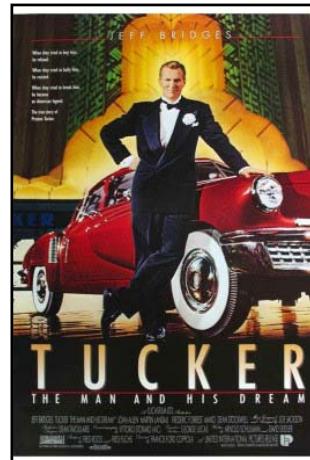
The Man and His Dream

1418

"The brainchild of Preston Tucker, largely forgotten since his automobile company went out of business, is storming back into the American consciousness thanks to 'Tucker: The Man and His Dream,' Francis Ford Coppola's new film account of Tucker's rise and fall. But a small cadre of car devotees has known all along that the Tucker is a special car..."

Chicagotribune.com, August 25, 1988

1419



"Francis Ford Coppola's ambitious movie 'Tucker: The Man and His Dream' (1988) curiously reminds me of nice-and-clean biography sets for elementary school students I used to read during my childhood years. In those books, there were always good-looking pictures depicting what great men and women did in their lifetime whenever I turned each page, and, of course, they were accompanied by the story written for them. From these books, I learned how great their achievements were, but I do not think I learned anything substantial about them as the human beings from the story. Of course, those books were well-intentioned for me and other kids, and I liked them. The problem is, they were hollow; they did not leave me any big impression except those nice pictures. And neither does the movie..."

Wordpress.com

1420

"As a child, my father told me about the new Tucker. He had ordered one and invested in the Tucker stock. He took me to see the car when it was on exhibit and I was very excited. I remember the details very well and for months kept asking, 'When is the Tucker coming?' Finally he said it was never coming, and that the big companies didn't want it to exist, and wouldn't let Mr. Tucker buy steel or the supplies he needed."

Francis Ford Coppola, Director

RE: Coppola's car-connection began at birth. It was a family tradition to give the middle name to an important family acquaintance (he was delivered at Detroit's Henry Ford Hospital). Coppola's father (a flutist with the Detroit Symphony) lost his \$5K investment - a lot of money for a middle-class man in the 1940s. However, he didn't blame Preston Tucker. To his son, the Tucker car became "a mythical thing." Nearly forty years later, Coppola directed *Tucker: The Man and His Dream*, a critical success that, in the Tucker tradition, failed to make money.

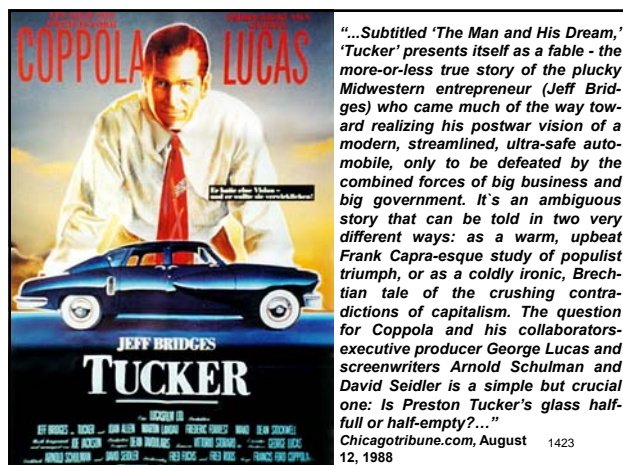
1421



"...From what I learned from in and out of the movie, Tucker probably could have been a successful figure in American automobile industry. Although his situation was not entirely perfect, he really could have made it. He was in the right time for his ideas, and he had the ability and resources to realize his dream. After the stiffness of World War II, American people wanted something new from their cars, and Tucker correctly saw the opportunity for the success..."

Wordpress.com

1422



“...Unfortunately, it’s a question that Coppola can’t answer, perhaps because he’s too close to the material. ‘Tucker’ is also the thinly disguised autobiography of Francis Ford Coppola, in which Tucker’s automobile plant stands in for Zoetrope Studios, the alternative film production facility Coppola hoped to create, only to be forced out of business by his creditors...”

Chicago Tribune.com, August 12, 1988

1424

“...In the story, we see how eager Tucker (Jeff Bridges) is about ‘The Car of Tomorrow.’ He proudly presents his idea in front of his family. They happily support his plan. People of his small company are willing to join him. Although there are several obstacles that worry his associate Abe (Martin Landau) much from the beginning, Tucker is always optimistic about the situation in his blind faith – even in the worst situation...”

Wordpress.com

1425



“...As a good salesman, he also masterfully raises the money through big publicity...However, there are more severe problems waiting for him. Big automobile companies in Detroit do not like Tucker’s plan from the beginning. They do not like that even more when his car turns out to be quite successful. So, they try to crush his dream, and they have politicians on their side...”

Wordpress.com

1426

“...And how does Tucker think about his plights? The movie does not show us what he thinks or what he feels. Despite Bridges’ considerable easy-going charm and flawless character embodiment, his Tucker comes to me as the man nothing more than the emblem of optimism with lots of smile rather than a real human being – he is just a thin cover for nuts and bolts of the story. There is no significant insight about him to interest us; we only know that he wants to make a great car and, sadly, that is all. What we get in the end is a typical, bland biography which ends with a big speech at the courthouse...”

Wordpress.com

1427



1428

"...Coppola had wanted to make this movie for a long time (he even tried to make a musical version of the movie with Leonard Bernstein in the 1970's), and it is not hard to see Coppola's plights in real life from Tucker's at many points in the story. Like Tucker, Coppola wanted to realize his big personal visions in his career and he struggled to do it in his own way..."

Wordpress.com

RE: in 1973, Coppola began development of a film based on the life of Preston Tucker (originally with Marlon Brando in the lead role). Starting in 1976, Coppola planned Tucker to be both a musical and an experimental film (with music and lyrics written by Leonard Bernstein, Betty Comden and Adolph Green). The project eventually collapsed when Coppola's American Zoetrope experienced financial problems. Tucker was revived in 1986 when Coppola's friend - George Lucas, signed-on as a producer.

1429



"...Yes, Coppola and Tucker looked like an ideal match, but sometimes it is not good for the filmmakers to get too personal to their subject. When the director or the writer respects the subject too much, the movie is bound to be limited or, in worse case, crippled by their good intentions and 'Tucker' is a classic example. While spending too much time on looking upon an idealistic hero and his cars, the movie loses the human dimensions, let alone the technical dimensions. The movie admires the beauty of Tucker's automobiles, but it informs us a little about its making process..."

Wordpress.com

1430

"...'Tucker: The Man and His Dream' is an interesting film because of the parallels between the director and his subject. However, it failed to show the man behind the dream. While emphasizing the individuality as great American value with all its heart, the movie never tells us about the cost of the struggle against fearful odds on personal level..."

Wordpress.com

1431

"...Under the end credits, Coppola presents a montage of photographs of the real Tucker, and it's hard at that moment not to feel cheated. The slender, dapper, knowing man who appears in the pictures isn't at all the person we've been watching. It wouldn't matter - 'Tucker' is emphatically not a documentary - except that this man seems much more interesting: more sly, more cultivated, much darker. He looks like he would have a good movie in him."

Chicagotribune.com, August 12, 1988

1432



1433

A Little Stinky

1434



"I like him because he feels human, the lovable American con man, the used-car salesman with his heart in the right place. In his way he was a charlatan. He wore those brown and white pointy shoes, and he was handsome and good with the ladies. He talked fast. He was a little stinky."
Francis Ford Coppola, Director

1435



1436



"Yes, it was that beautiful, gleaming car that caught my imagination, but it was also something else: the whole notion of what our country was going to be like in twenty or thirty years, based on our new position in the world...our technological inventiveness...It was a safe car, a revolutionary car in terms of engineering, and it was a beautiful car. In every way, it was a much better machine than the stuff the major companies were offering."
Francis Ford Coppola, Director

1437



1438

Part 12

The Verdict of History

1439

Mixed Reviews

1440

"...The original Tucker had a number of features later adopted by Detroit, including disc brakes, fully independent suspension and doors that rose into the roof line for ease of entering or leaving the car. The car also pioneered such safety features as padded dashboards and safety glass windshields. The Tucker might even have introduced seatbelts had Tucker's aides not convinced him that they would give the impression the car was unsafe..."

Chicagotribune.com, July 3, 1994

RE: interestingly, seatbelts were first invented in 1910 as a safety feature for airplanes (to keep pilots from falling out of the cockpit)

1441

"...According to Thomas Bonsall, president of Stony Run Press, a Baltimore publisher of books on classic cars, the Tucker was 'an interesting effort' but a car with some serious flaws. The suspension was apparently screwy, although it was something that could be fixed,' said Bonsall, who said he had recently met a collector who had to re-engineer the suspension on his Tucker..."

Chicagotribune.com, July 3, 1994

1442

"...The Tucker's impact on the automotive world is what most impresses Max Novil, 82, one of the first five engineers hired by Tucker in January 1946. 'I look back on the car as a success,' said Novil, who retired only five years ago after an engineering career that spanned six decades. 'Ideas that were part of that car are still being used today'..."

Chicagotribune.com, July 3, 1994

1443

"...Bonsall also took issue with the car's engine, a converted Franklin flat 6 that had been designed for a helicopter. 'There was some concern that the car could really be made (in quantity) with that engine for the price Tucker projected.' And Miller pointed to the use of the pre-war era Cord transmission as one of the suspect features of the Tucker..."

Chicagotribune.com, July 3, 1994

1444

"...It was in those heady days that Novil got his only ride in a Tucker, a 10-minute spin on Cicero Avenue near the plant. 'The thing took off like a rocket,' he recalled. 'It was very fast and smooth, and there was no noise. It was like riding on a cloud.' The car's speed, the product of a 334-cubic-inch, 166-horsepower aircraft engine, gave rise to an unusual feature that was added to at least one Tucker - a dashboard switch that briefly lit a neon sign in the rear window, notifying fellow motorists: 'You've just been passed by a Tucker'..."

Chicagotribune.com, July 3, 1994

1445



1446

“...‘There’s no way to determine whether it was the world’s greatest car or the world’s greatest piece of junk with only 50 built,’ he said. ‘If they had built 50,000 of them and John Q. Public had gotten his hands on the Tucker, that would have been the real test. If it had been mass-produced, there would have been flaw after flaw after flaw’...”
Chicagotribune.com, July 3, 1994

1447

“...‘The car was not a fraud, and the man was not a fraud,’ engineer Novil said. ‘The proof is that the ideas you found in the Tucker are being used in every car around the world today.’”
Chicagotribune.com, July 3, 1994

1448

The Holy Grail

1449

“...‘Rear-engine’ was the automotive buzz word after WWII. Virtually no one in America had driven a car with its engine so located, but somehow there was a widespread belief that this was the way almost all cars would soon be made. There were rumors of this or that American manufacturer planning such a car...or already testing one. Some postwar models of front-engine, rear-drive cars even appeared with phony air exits around the trunk area! But only Preston Tucker was firmly committed to the rear-engine car. He and his engineers had sold themselves on the limited and even dubious virtues of such a design, then pursued the Holy Grail with religious zeal...”
Autoweek, July 4, 1988

1450



“...Indeed, his car was not only to be rear-engined but would also bristle with other innovations. Some of them were commendably safety-related such as disc-brakes and a windshield so installed as to pop out during an accident if hit by a passenger. Most were more or less untested - such as the new independent suspension by rubber elements in torsion...”
Autoweek, July 4, 1988

1451

1948 TUCKER 589

"Experimental Engine"

Owner: The San Diego Automotive Museum

Engine Type	Flat six opposed	Number built	6
Bore & Stroke	5 in x 5 in	Horsepower	150
Displacement	589 cubic inches	Operating speed	1,700 MAX rpm
Valves	Hydraulic	Weight	354 lbs.
Miles per gallon	35 (projected)	Other	Fuel injected

In 1948 Preston Tucker wanted to build a new revolutionary automobile. Tucker's goal was to build a powerful, economical engine with as few parts as possible to power his new car. He started by having his engineers design a new type of engine taking the best features from existing marine, aircraft and automotive engines.

The flat six opposed configuration utilizes a radical oil driven valve system (see valve exhibit). The engine was mounted at a 90 degree angle in the rear of the car with torque converters on both ends of the crankshaft connected directly to the wheels. This system eliminated 800 moving parts such as: rocker arms, camshaft, timing chains, pushrods, flywheel, transmission, driveshaft and differential and more.

Although originally designed for fuel injection this experimental engine was capable of mounting 2, 4, or 6 carburetors as well. Except for pistons, connecting rods and crankshaft, all castings are aluminum.

A total of six 589 engines were cast. Four have been destroyed or lost to time. One other exists but is beyond being operable leaving this as the only complete Tucker 589 engine. This was a test stand model.

Due to technological problems with foaming hydraulic oil which could not be solved at the time, Preston Tucker abandoned the "589" and switched to the Franklin 335 helicopter engine for his fifty cars. Today, modern technology and materials have made this valve train design workable and it is now being used in high performance racing cars.

“...His original engine (of which at least one running prototype was built) was a fascinating departure from then-current automotive practice - a huge 9.8-liter, light alloy flat-six with hydraulic, not mechanical, operation of the valves! An engine, it was said, that idles at a mere 100 rpm, revved only to about 1,300, but developed such immense low-speed torque that it was geared to pull 50 mph at 500 rpm!...”

Autoweek, July 4, 1988

1452



1453



1454



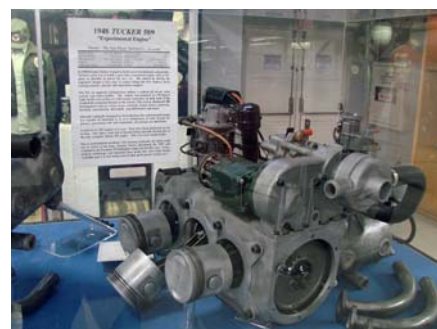
1455



1456



1457



1458



1459



"...Unfortunately, the time and money expended on this unique engine were a total loss, for it became obvious that many more years would be required to get this radical concept developed and refined enough to be ready for production, and Tucker needed an engine in a matter of months..."

Autoweek, July 4, 1988

1460

No Simple Task

1461



"...So a crash program of adapting an existing 5.5-liter, air-cooled, flat-six helicopter unit made by Franklin was instituted. No simple task either, for it was considered advisable to convert it to water-cooling and make other modifications..."

Autoweek, July 4, 1988

1462

Make Workable

1463

"...And the list of innovations Tucker had to make workable didn't stop at a powerplant. Handling was another matter. Getting a long-wheelbase, rear-engine sedan large enough to seat six to handle in a satisfactory manner was an intimidating task never yet solved by anyone. Then there was a fuel injection system and even hydraulic steering under development - plus work on a team of race cars..."

Autoweek, July 4, 1988

1464

A Goer and a Looker

1465

"...One break the Tucker project got was to hire designer Alex Tremulis, who created a body shape that was effectively aerodynamic, wide and purposeful-looking. The Tucker had the most interesting and exciting styling since the 810 Cord and the original Lincoln Continental. And it was a goer as well as a looker...to 60 in under 11 seconds and on to about 117 mph. No sedan would equal this for years..."

Autoweek, July 4, 1988

1466

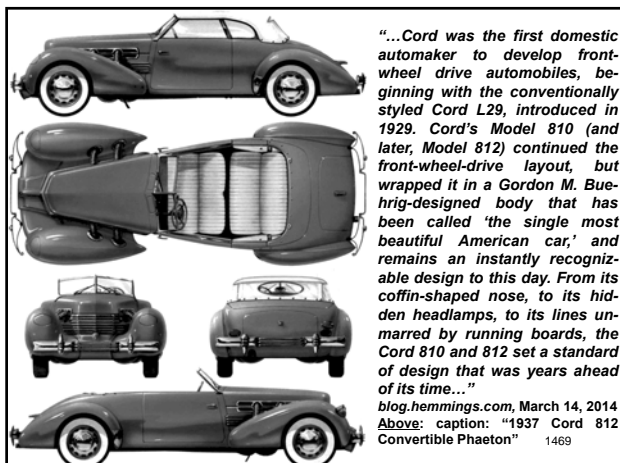
Ahead of Their Time

1467

"With American innovation as the theme of this year's Palos Verdes Concours d'Elegance, concours organizers gravitated toward two of the country's most out-of-the-box cars for its featured marques: the front-wheel-drive Cord and the rear-engine Tucker 48, both of which exemplify the merger of aesthetics, science and innovation..."

blog.hemmings.com, March 14, 2014

1468



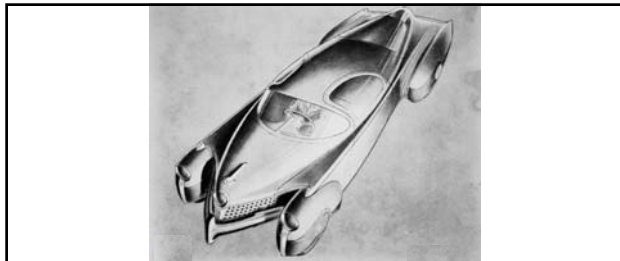
"...Cord was the first domestic automaker to develop front-wheel drive automobiles, beginning with the conventionally styled Cord L29, introduced in 1929. Cord's Model 810 (and later, Model 812) continued the front-wheel-drive layout, but wrapped it in a Gordon M. Buehrig-designed body that has been called 'the single most beautiful American car,' and remains an instantly recognizable design to this day. From its coffin-shaped nose, to its hidden headlamps, to its lines unmarred by running boards, the Cord 810 and 812 set a standard of design that was years ahead of its time..."

blog.hemmings.com, March 14, 2014
Above: caption: "1937 Cord 812 Convertible Phaeton"

1469

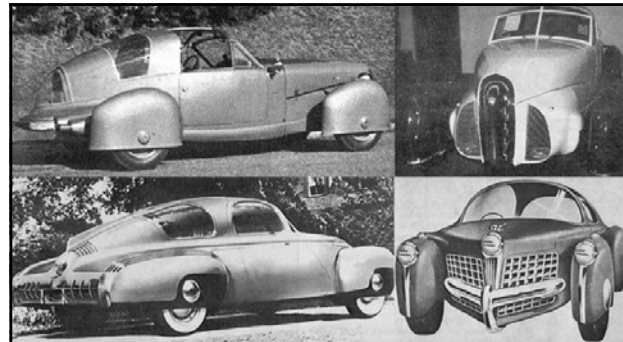


1470

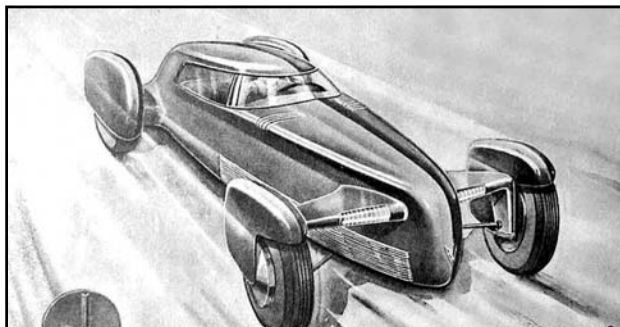


Absent from the list of Gordon Buehrig's many masterpieces of automotive design is his 1948 "Tasco." Buehrig referred to the prototype car as his "Personal Edsel" and, although intriguing, it's certainly out-of-place when compared to the many beautiful automobiles Buehrig is credited with having designed in his lifetime. *Lippincott & Margulies* team designer *Tucker Madawick* theorized that the *Tasco* was a derivative of the original *Tucker Torpedo*, designed by *George S. Lawson*.

Above: caption: "George Lawson's Tucker Torpedo first appeared in December of 1945 - nearly a year before Buehrig patented his Tasco design - and was publicized consistently" 1471

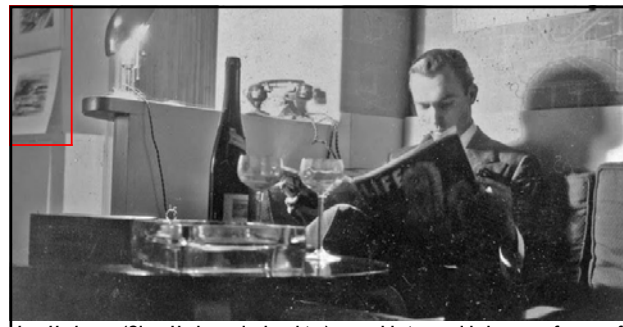


Above: a photo comparison of the two cars (published by Madawick), reveals that both vehicles feature an overall boat shape with fully skirted cycle fenders, chrome vertical front bar and a wrap-around backlight. The Tasco's famed "T-Tops" also reflect the Torpedo's high-cutting door line. Add to this the fact that Buehrig patented the Tasco's design in November of 1946 - nearly a year *after* the Torpedo first appeared in publications - and the similarities do, indeed, seem to support the idea that the *Tasco* (top L&R) was inspired by Lawson's *Tucker Torpedo* (bottom L&R). 1472



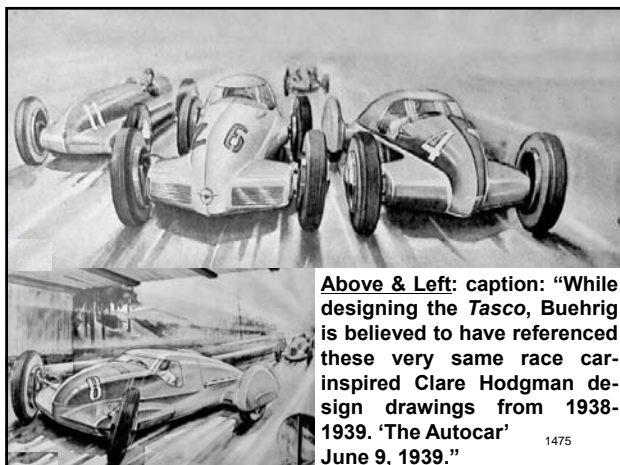
However, Buehrig credited the cycle fenders not to the *Tucker Torpedo* but, rather, to one of a group of drawings by Loewy designer *Clare Hodgman* which was published in the English magazine, *Motor*.

Above: caption: "Hodgman drawing which likely set the design pace for Buehrig's Tasco" 1473



Lee Hodgman (Clare Hodgman's daughter), was able to provide images of some of her father's drawings that appear to be those Buehrig mentioned in his account of the genesis of the *Tasco*'s design. Hodgman, for his own pleasure (while living in London on assignment from *Raymond Loewy*), had created a series of futuristic race car inspired auto renderings - some with cycle fenders. In 1939, the artwork was printed in a well-known English magazine, *The Autocar*.

Above: caption: "Loewy designer Clare Hodgman relaxes in his London apartment in 1938. Futuristic car renderings used as decoration can be seen on the left." 1474



Above & Left: caption: "While designing the *Tasco*, Buehrig is believed to have referenced these very same race car-inspired Clare Hodgman design drawings from 1938-1939. 'The Autocar' June 9, 1939." 1475

A further examination of these various Hodgman designs, one in particular does seem to anticipate Buehrig's car. As with the later *Tasco*, it features an enclosed body with a slender overall shape, mostly skirted cycle fenders separate from the body as well as a sharp crease through the entire center of the car. These shared elements suggest that Hodgman's fantasy car heavily influenced Buehrig's *Tasco*. In retrospect, the *Torpedo* seems somewhat less influential than suggested by Madawick. However, those elements they do share appear to be more than coincidental, especially when considering that it would have been impossible for Buehrig to have avoided the headline-grabbing Tucker throughout 1946; the year the *Tasco* was being designed.

1476



1477

To Be Expected

1478



"...I owned a Tucker. Not for long, but I did own and drive it...its handling was no surprise - with so much weight so far aft, in such a long wheelbase, oversteer was only to be expected. And it was there to a quite disconcerting degree despite the helpfully quick steering ratio. The Tucker engine, I believe, weighed only 300 pounds dry. But add water, a radiator, transmission and differential and there were some 700 pounds back there (1,100 pounds or more with three in the rear seat) waiting to introduce unsuspecting ex-Buick drivers to the thrills and throes of oversteer..."

1479

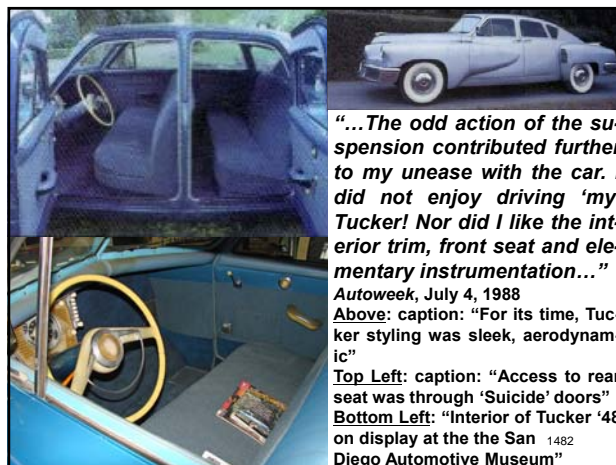
Autoweek, July 4, 1988



1480

Not Ready for Prime Time

1481



"...The odd action of the suspension contributed further to my unease with the car. I did not enjoy driving 'my' Tucker! Nor did I like the interior trim, front seat and elementary instrumentation..."

Autoweek, July 4, 1988

Above: caption: "For its time, Tucker styling was sleek, aerodynamic"

Top Left: caption: "Access to rear seat was through 'Suicide' doors"
Bottom Left: "Interior of Tucker '48 on display at the the San Diego Automotive Museum"

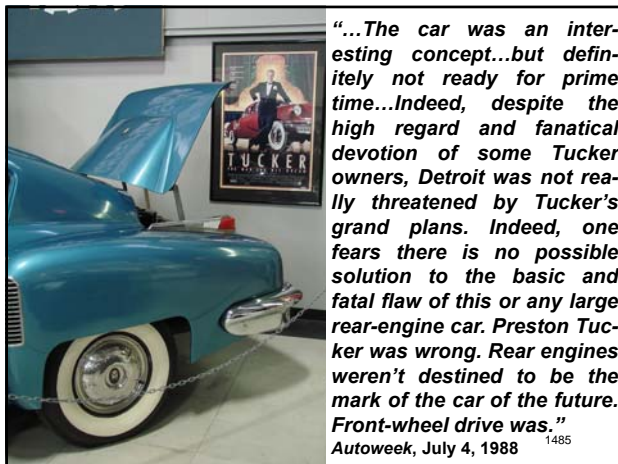
1482



1483



1484



"...The car was an interesting concept...but definitely not ready for prime time...Indeed, despite the high regard and fanatical devotion of some Tucker owners, Detroit was not really threatened by Tucker's grand plans. Indeed, one fears there is no possible solution to the basic and fatal flaw of this or any large rear-engine car. Preston Tucker was wrong. Rear engines weren't destined to be the mark of the car of the future. Front-wheel drive was."

Autoweek, July 4, 1988

1485

Fortune's Favor

1486

"Fortune, the saying goes, favors the bold. Were that truly the case, the Tucker Model 48 would have been an uncontested success for Tucker Corporation and Preston Thomas Tucker, the visionary jack-of-all-trades inventor behind its creation. Instead, just as production of one of the 20th century's most innovative automobiles was about to start, the government (as some believe, pressured by Detroit's Big Three automakers) stepped in and effectively shut Tucker down..."

blog.hemmings.com, August 1, 2013

1487

"...To this day, the real story behind the failure of the Tucker Corporation remains unclear, though many buy into the version iterated in the 1988 Francis Ford Coppola film Tucker: The Man and His Dream. Some pin it on the ambitions of Preston Tucker, reportedly far more of a visionary than a businessman. Others blame it on the evil machinations of the Detroit Big Three automakers, who allegedly convinced the government that the success of a small, upstart automaker with a revolutionary design was in nobody's best interest..."

blog.hemmings.com, August 1, 2013

1488

"Tucker himself, if he had possessed more self-understanding and business savvy, might have prospered as a custom car remodeler. He did have a love of cars and he had experience in the automotive field. In a way, the Tucker car itself was a customized remodeling of existing car concepts. Tucker's use of the Cord transmission, for example, showed that he understood nifty innovations which somehow hadn't succeeded in the market. But one of Tucker's problems was in being carried away by a 'dream' while ignoring the practical work needed to apply it for useful purposes. Mere possession of a dream does not excuse a person from exercising prudence in business relationships."

Melvin Barger, Economist

1489

Despite Preston Tucker's acquittal on all charges, speculation has continued with regard to the question of whether Tucker was sincere in his intentions to produce a new car and bring it to market or, if the entire enterprise was a scam, designed for the sole purpose of tricking gullible investors. The *Tucker Automobile Club of America* has amassed over 400K drawings/blueprints, corporate documents and letters which they believe suggest that Tucker was, in fact, developing the manufacturing process necessary to mass-produce the *Tucker 48*. They also point to the fact that by the time of the SEC investigation, Tucker had hired over 1,900 employees, including teams of engineers and machinists. At the trial, Tucker VP Lee Treese testified that they were at 90% readiness (with industrial machinery) at the Chicago plant, nearly at mass-production capacity. After the auction, one remaining Tucker 48 was given to *Preston Tucker* and another to his mother.

1490



"...While the truth likely lies between these extremes, this much is clear: The Tucker Model 48 gave us a brief glimpse into the future of the automobile, showing what's possible when automakers favor innovation over profitability"

blog.hemmings.com, August 1, 2013

1491



Ironically, *Otto Kerner, Jr.*, the U.S. Attorney who had aggressively pursued the *Tucker Corporation*, was convicted on seventeen counts of bribery, conspiracy, perjury and related charges for stock fraud in 1974. The first sitting federal appellate judge to ever be convicted, he was sentenced to three years in prison and fined \$50K. The Tucker family held on to *Aircooled Motors* until 1961, when it was sold to *Aero Industries*. Over 10K Tucker Corporation stock certificates (ca. 1947) were personally signed by *Preston Tucker* (above), making them valuable and sought-after collector items. Perhaps the most enduring legacy of the entire Tucker saga are the Tucker 1948's revolutionary ideas in car safety which helped to establish modern safety standards for passenger automobiles.

1492

"Even Henry Ford failed the first time out"

Preston Tucker

RE: statement he made after his trial was over. Tucker's optimism was remarkable given all he had gone through. After the acquittal, Preston Tucker's reputation rebounded - he was ready for new challenges.

1493

"You miss 100% of the shots you don't take"

Wayne Gretsky

1494

Keepers of the Flame

1495

In 1954, a group of investors tried to revive the *Tucker Corporation* by soliciting investors (mostly former Tucker distributors and dealership owners) for a new car. This effort was led by *George A. Schmidt*, former president of the *Tucker Dealers Association*. They developed sketches for a stylish two-door convertible, but were unable to generate enough support to get it off the ground.

1496



"Every summer, nearly 100 diehard auto enthusiasts from the U.S., England, Norway and Belgium gather for a convention to pay homage to a car built in Chicago nearly a half century ago that few of them have owned-because only 51 were built. The car these aficionados cherish, swap stories about and occasionally get to ride in during their four-day convention is the Tucker..."

1497

Chicagotribune.com, July 3, 1994

A Quintessential American

1498

"If someone has a beautiful dream, but doesn't know how to achieve it, is he a great man or not? Whether Tucker was a great man or not, he was a quintessential American."

Roger White, Curator - National Museum of American History (NMAH)

1499



1500